ROYAL NAVY HANDBOOKS

NAVAL ADMINISTRATION

SIR VESEY HAMILTON, G.C.B.

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THE BOARD ROOM OF THE ADMIRALTY, 1895.

NAVAL ADMINISTRATION

THE CONSTITUTION, CHARACTER, AND FUNCTIONS OF THE BOARD OF ADMIRALTY, AND OF THE CIVIL DEPARTMENTS IT DIRECTS

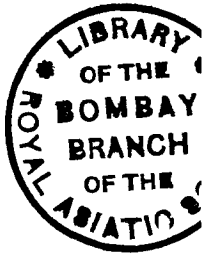
106679

BY

ADMIRAL SIR R. VESEY HAMILTON, G.C.B.

LATE FIRST SEA LORD OF THE ADMIRALTY

WITH ILLUSTRATIONS



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PREFACE.

THE purpose of this volume is to describe the organization, system, and working of the Board of Admiralty, and of the Civil Departments through which its operations are conducted, to explain and illustrate the character and procedure of our Naval Administration. The subject will, I believe, be admitted to be one of the highest importance, because with the Admiralty Board rests the constitution, maintenance and distribution of the Fleet, and, without efficiency on shore in supplying its numerous and complicated needs, the requirements of the public service cannot be efficiently carried out—a fact well illustrated in Burrows's "Life of Lord Hawke," where we read that "the beer brewed at Plymouth is so bad . . . Our daily employment is condemning of it." Yet the difficulties in preparing the work have been great and manifold.

An accurate knowledge of the subject would seem to be of much importance to the Naval Service, to politicians, and to the press; but while our system of Naval Administration has been the subject of attack, and much that is known to the public concerning it has been learned from its assailants, I was confronted by the fact that no work explanatory of the system

has ever been written. There have thus been encountered such difficulties as often beset the path of the pioneer.

In the next place very great difficulties arose from the inherent complexity of the subject. The character and constitutional position of the Admiralty, its development from earlier conditions, the growth of the Civil branches to more than semi-independence, the subjection of these to the true interests of the Service, the reforms entered upon by Lord St. Vincent, and brought to practical result by Sir James Graham thirty years later, and finally the vast extent and character of the work carried on by the Civil Departments—all these matters made the work of elucidation no light task. If the volume that results, should conduce to a truer conception of the character and working of the Admiralty Board, and to an even better understanding between the Department ashore and the Service afloat, it will answer a good purpose.

The volume is not a defence of the Admiralty. On the contrary, the reader will discover that I do not consider as perfect all the generally well ordered machinery by which the Admiralty carries on its work. But I have been led to the conclusion that much of the criticism of Admiralty methods which has been offered concerns rather the administrative acts of individuals, and that the system itself embodies high advantages, such as are possessed by no other department of the State. They are merits that have won the admiration of the Royal Commission on Civil Establishments, and generally of the Hartington Commis-

sion, and of many statesmen. In the earlier portion of the book, and particularly in that upon the Admiralty Patent, some matters that have led to wide misapprehension of the character, constitution, and forms of the Admiralty are elucidated.

And now I have the pleasing duty of offering my most grateful thanks to all who have assisted me in this volume, for help without which it would have indeed been a far heavier labour than it proved. To Commander Robinson's excellent work, "The British Fleet," I am much indebted, as also to his literary experience for most useful hints as to the best method of procedure.

But it is to Mr. John Leyland that I am the most deeply indebted. He has helped me throughout the work, and has paid special attention to the historical and constitutional aspects of Naval Administration. There are some parts I could not have written without his assistance, so cheerfully rendered. I am glad of the opportunity of doing justice to his zeal and energy.

For myself, I have learnt more of the interior working of the Admiralty by the compilation of this volume than I did in five years at the Admiralty, where the work in one's own department is more than sufficient for the day.

R. Vesey Hamilton,
Admiral.

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NAVAL ADMINISTRATION.

PART I.

THE SYSTEM.

CHAPTER I.

HOW THE SYSTEM HAS GROWN.

IT is unnecessary in this volume to dwell at any length upon the importance of a well-ordered and efficient system of naval administration. That administration exists for the proper constitution, maintenance, and disposition of the fleet in its material and personal elements. It is the organizing force behind our Sea Power, shaping and broadly directing that maritime arm which safeguards the kingdom from invasion, protects its food supplies and its commerce, and, as a defensive force, binds the Empire itself together. It is that system and that machinery by which the fleet is created and sustained, by which it is supplied with trained officers and men, distributed throughout the world, and constantly furnished with everything necessary for the exercise of its functions in peace, and for its readiness in case of war. So great a naval function, and so vast and complex a business plainly demand a means of

administration that shall be sound and sufficient in itself; and Englishmen may certainly congratulate themselves upon the finally successful conduct of their maritime affairs in the past, and upon the possession of an organization which provides for the Empire a Navy that is cheaper and more efficient than any other in the world.

I have spoken of our naval administration as a system and a machinery. In this way I propose to regard it in the present volume. I do not intend to discuss the wisdom or unwisdom of those who have handled and controlled the means of our naval defence, nor the rectitude or vigilance of those through whose hands have passed the supplies by which that defence has been carried on. Triumphant as have been our final successes, and surpassingly beneficent as have been the results that have flowed from them, our history teems with instances of the misdirection and ill-control of our naval affairs. There was a time when the Dutch were allowed to force themselves into the Medway; we lay powerless before the strangely inert alliance of the French and the Spaniards in 1779; we despatched small, inferior, and ill-designed ships against the Americans in 1812. But these are examples of want of administrative wisdom. They do not necessarily imply the existence of a defective system, nor of inadequate administrative machinery. Yet such shortcomings and failures as these have often discredited our naval administration, and have contributed to a misunderstanding of the Admiralty Board.

Few subjects in the range of naval topics seem to me so interesting and instructive as the constitution, character, and working of that Board, and it is right that the system and machinery of its operations should be explained and described. This is desirable, too, because of the somewhat anomalous constitutional position of the Board itself, working under Orders in Council at variance with the Patent under which the Lords Commissioners exercise

their powers. Want of public knowledge concerning the methods of naval administration is no new thing. In the beginning of the last century the author of "The Œconomy of His Majesty's Navy," remarked that there were then too many, "and those not ignorant persons in other respects," who could "scarce distinguish between the Admiralty and Navy officers, because both had a relation to the maritime power." There is reason to believe that like misunderstanding prevails largely at the present day.

But neither the Admiralty nor its work can be understood without reference to the conditions that have gone before. Our system of naval administration has been developed historically, and been moulded by circumstances. It is no product of the organizing skill of one or a few individuals, or of a single period. It is, if I may be permitted the expression, an organic growth, having its roots far back in mediæval history or earlier, developed under constantly expanding conditions, but owing its special character to the original circumstances out of which it grew. The position of the Admiralty Board, in short, is determined by the fact that it is a body representing, and representing in a true sense, the Lord High Admiral, and its powers and operation depend more upon long uninterrupted usage than upon the instruments that actually give it authority. I shall show presently that to this very circumstance the Admiralty owes the efficiency of its character, and of the means at its disposal. Its executive operations are conducted through the working of a series of related Civil Departments, which, like itself, have been created, expanded, and transformed under conditions progressively changed.

The dominant character of the conduct of Admiralty administration is the flexibility of its working. The members of the Board are not, in a rigid sense, heads of departments. Subject to the necessary (constitutional) supremacy of the Cabinet Minister presiding, they are

jointly co-equal "Commissioners for executing the office of High Admiral of the United Kingdom and of the territories thereunto belonging, and of High Admiral of the Colonies and other dominions." They are in direct and constant communication with the First Lord and with one another, as individually with the Civil Departments under their control. It will be seen in this volume that, from this constitution and system of working, results, and always may result, a sound and efficient naval administration. That administration, be it noted, is carried on under the responsibility of the First Lord, whose power, as related to his necessary responsibility, has tended to increase. The Board of Admiralty, as Sir James Graham said before a Select Committee of the House of Commons, in 1861, could indeed never work unless the First Lord were supreme, and did exercise constantly supreme and controlling authority. If then, on one hand, we regard the Lords of the Admiralty as executing the official functions and powers of a single individual, and as still possessing in a large measure the rapid decision and means of action which are possible to an individual, it must not be lost sight of, on the other, that the First Lord, through the incidence of constitutional responsibility, occupies a position closely analogous to that of the Lord High Admiral himself, and that therefore the other Lords are, as it were, from this point of view, the Lord High Admiral's counsellors, without the restrictive limitations which were imposed upon these.

Until the beginning of the fifteenth century, the naval business of the country was conducted by the king's council. The executive control of the fleet was vested in "Keepers of the Sea," afterwards designated "Admirals" —who also exercised judicial functions—and there were "Keepers of the King's Ships," and "Keepers of the Sea Ports," even in the days of John. The admirals were appointed to localized fleets, and it is clear that Sir

William de Leybourne, who was described at the assembly at Bruges, March 8th, 1287, as "Admirallus Maris Angliæ," never executed such functions as were afterwards conferred upon the Lords High Admiral. John Beaufort, Earl of Somerset, eldest legitimized son of John of Gaunt by Katherine Swinford, was appointed "Admiral of England," in 1406, with the view of removing the maladministration of the Navy which had so disastrously affected the commerce of the country during the latter part of the fourteenth century. Other admirals followed in the persons of the Earl of Kent, Sir Thomas Beaufort, John, Duke of Bedford, John Holland, Duke of Exeter, and his son, William de la Pole, Earl of Suffolk, and Richard Neville, Earl of Warwick, with increasing powers. The office of Lord High Admiral thus created, confiding to its holder, under the crown, the naval administration of the kingdom, was retained by individuals until 1628, and has continued existent, chiefly in commission, to the present time. It is worthy of note that the functions now exercised, under Patent, by the Board of Admiralty, are conferred by reference to the Patents of the Lords High Admiral, which carry us back still earlier for authority to antecedent usage. The first Patent, however, bearing special resemblance to the present one, was that conferred upon the Earl of Warwick by Henry VI.

The naval business of the country had so far increased by the reign of Henry VIII., that the administrative machinery called for expansion, and to that time we date the reorganization or actual establishment of the Admiralty and the Navy Board. There was now a large array of civil establishments, including victualling, ordnance, and subsidiary branches, with dockyards or storehouses at Woolwich, Deptford, and Portsmouth. The existence of the ordnance branch is noteworthy. In this matter the navy was not yet dependent on the War Department. The Navy Board was organized to take charge of the civil

administration under the Admiralty, while the directive and executive duties of the Lord High Admiral remained with the Admiralty Office. A Surveyor of Marine Causes, a Treasurer, and a Comptroller of the Navy now appear, and the Trinity House "at Deptford Strond" was incorporated. The organization which grew up under Henry VIII. took definite shape during the reign of his successor, when the constitution was revised, and the civil administration vested by ordinances in a Board of Principal Officers subordinate to the Lord High Admiral. We can henceforth trace distinctly the work of civil administration going forward under the Navy and Victualling Boards, apart from, but subject to, the Admiralty itself, up to 1832, when Sir James Graham succeeded in putting an end to the then practically divided control.

A further step was taken in the reign of James I. to advance the work of the Admiralty by the appointment of a council of officers and men of rank—forerunner of the Admiralty Board—to assist Buckingham, who succeeded Nottingham as Lord High Admiral in 1619. Buckingham was stabbed to the heart at Portsmouth, in 1628, by John Felton, a discontented officer who had served under him, while fitting out a second expedition for the relief of Rochelle, and the office of Lord High Admiral was then for the first time placed in commission, the commissioners being the great officers of state. During the Commonwealth the affairs both of the Admiralty and Navy Boards were conducted by committees of Parliament, and the service gained much from the administrative ability of Blake; but, at the Restoration, James, Duke of York, was appointed Lord High Admiral, and to him was due the reconstitution of the Navy Board, and the appointment of three commissioners to act with the Treasurer of the Navy, the Comptroller, the Surveyor, and the Clerk of the Acts. It may be noted here as significant that the Comptroller of the Navy, as directed by his patent, was in confidential

WINDEX COMMERCII
ROBERT BLAKE
General and Admiral of the FORCES
of ENGLAND &c.
Wafted on thunder through th' affrighted Shores
Of pale-tremendous Submission BLAKE.
And France, trembling to his armour, swears,
O save us still, O gallant and brave
Thou bold conveyer of Britannia's FAME.
Unconquerable BLAKE!

ROBERT BLAKE.

communication with the First Lord of the Admiralty; and the general practice grew up that the naval estimates of the year were first made by these two, without any consultation with the rest of the members of either the Admiralty or Navy Boards.

Upon the passing of the Test Act in 1673, the Duke of York, unable to subscribe to it, resigned his office, and Prince Rupert was placed at the head of a new Admiralty Commission; but shortly afterwards Charles himself, through his Privy Council, assumed the administration of the navy, and exercised it until his death (1685). At this time the civil business of the Navy, including victualling and transport, was conducted by the Navy Board, but Victualling Commissioners were appointed in 1683, and a Transport Board was instituted in 1689. During the reign of Charles II. great disputes had arisen between himself and his brother as to the exercise of the large powers of the Lord High Admiral, but, when the latter came to the throne as James II., he exercised both the regal authority and that of Lord High Admiral, which was vested in him as sovereign, and personally administered the Navy through Pepys and the Navy Board until 1688. James II. was certainly one of the ablest of our naval administrators. Both as Duke of York and as king every act shows his high administrative capacity. The instructions and standing orders which he drew up for the guidance of the Principal Officers and Commissioners of the Navy (printed in 1717) are the expansion of earlier regulations, and give a clear view of the several duties of the Treasurer, Comptroller, Surveyor, and Clerk of the Acts, as well as of the Storekeeper, Clerk of the Cheque, and other officials at the yards. Signing himself "your affectionate Friend," James charged the Principal Officers—Lord Berkeley, Sir William Penn, Peter Pett, Sir George Carteret, Treasurer-Comptroller, Sir William Batten, Surveyor, and Samuel Pepys, Clerk of the Acts—with the duty of seeing to it that there

was honest dealing at the dockyards, and that the sick and maimed were relieved from the Chatham "Chest," and also of reporting upon the conduct of officials, and suspending the prodigal. Upon the return of ships to port, strict inquiry was to be made as to the behaviour during the voyage of the "standing officers," and the unfit were to be certified. The Principal Officers and Commissioners, thus admonished, were to be in constant communication among themselves, consulting and advising "by common council and argument of most voices," living as near together as they conveniently could, and meeting at least twice a week at the Navy Office, and the times of their meetings were to be made public.[1] No instruction could have been sounder. The naval transactions of this period are admirably reflected in the famous diary of Pepys, and in his "Memoirs of the Navy," printed in 1690.

After the Revolution, in 1690, a declaratory Act was passed (2 William and Mary, sess. 2, c. 2), which is the original authority for the present constitution of the Admiralty Board. It pronounced that "all and singular authorities, jurisdictions, and powers which, by Act of Parliament *or otherwise*"—that is, by usage—had been "lawfully vested" in the Lord High Admiral of England, had always appertained, and did and should appertain to the Commissioners for executing the office for the time being, "to all intents and purposes as if the said Commissioners were Lord High Admiral of England." Two years later the House of Commons recommended the constitution of a new Commission of Admiralty, and that "for the future all orders for the management of the fleet do pass through the Admiralty that shall be so constituted."

In 1701 the Admiralty Commission was dissolved, and the high office was unwillingly accepted by Thomas, Earl

[1] "The Œconomy of His Majesty's Navy Office." By an Officer of the Navy. London, 1717.

of Pembroke, who was succeeded in the following year by Prince George of Denmark, husband of Queen Anne. The prince's naval administration as Lord High Admiral was not a great success, being discredited by the incapacity of George Churchill, younger brother of the Duke of Marlborough, the leading spirit in his council, who had formerly held a seat at the Admiralty, and now leapt at a bound to the rank of Admiral of the Blue. "The prince," says Burnet, "knowing little of naval affairs, was imposed upon by men of evil designs, who sheltered themselves under his name." At this time the traditions of the naval administration were preserved by Josiah Burchett, the naval chronicler, who had been Pepys's body-servant, and afterwards secretary to Russell in the Mediterranean, and who, as joint-secretary and secretary, was at the Admiralty from 1695 to 1742.

From the death of Prince George in 1709 to the present time—with the exception of a short period, from May 2nd, 1827, to September 19th, 1828, when the Duke of Clarence was Lord High Admiral—the office has remained in commission. The eighteenth century was a great period in our naval history. It witnessed the victories of Rooke and Shovell, of Sir George Byng, of Anson and Rodney, of Hawke, Howe, and many more. It saw our country raised to the splendid position of undisputed mistress of the seas. But it is not necessary, for the purpose of this book, to deal with the special administrative acts of successive Boards of Admiralty. Prominent in the roll of First Lords, distinguished either as administrators or individuals, stand the names of Edward Russell, Earl of Orford (1697, 1709, and 1714), the victor of La Hogue; James, Earl of Berkeley (1717); George Byng, Viscount Torrington (1727); John Russell, fourth Duke of Bedford (1744); John Montagu, Earl of Sandwich—"Jemmy Twitcher," —whose industry, says Walpole, was so remarkable that the world mistook it for ability (1748, 1763, and 1771)

Anson (1757); Hawke (1766); Keppel (1782); and Howe (1783); the second Earl Spencer (1794); and the great Earl St. Vincent (1801). During this long period, which brings us up to the eve of Trafalgar, the naval administration remained unchanged in its principles, the successive Boards of Admiralty exercising the powers conferred upon them by long usage and under Act of Parliament. The several lords usually lived in close relation among themselves, and the flexibility of the system—to which I have drawn attention as its dominant feature—rendered easy the processes of administration within the Admiralty itself.

But, as I shall show in the next chapter, the relation between the Civil Departments and the Admiralty Board had become strained. With growing importance the Departments had escaped largely from Admiralty control, and gross abuses existed within themselves. St. Vincent, on board the *Ville de Paris*, before Cadiz, August 27th, 1797, wrote to Lord Spencer: "You may rest assured the Civil Branch of the Navy is rotten to the very core." By Order in Council of January 12th, 1792, the Admiralty had been called upon to investigate the condition of every department; but the time was one of great stress throughout the naval machine, and to attempt drastic reforms at such a juncture was felt to be dangerous, if not impossible. The Finance Committee pressed urgency upon the Admiralty afresh in 1798, and it was with the purpose, in fitting season, of waging war with the Civil Departments that St. Vincent went to the Admiralty in 1801. The Civil Departments, many of which were thus to be assailed, had increased in number with the growth of the Navy. In 1782, when Keppel was First Lord, there were thirteen departments in all. The Navy Office itself, located in Seething Lane, was charged with shipbuilding, repairing, and fitting, and the mustering of ships' companies. The Victualling Office pursued its work on Tower Hill, with a

subsidiary branch at Deptford, and the Ordnance Office, in the Tower, had supervision of warlike stores. The Pay Office, in Broad Street, dealing with wages, half-pay, and pensions, was afterwards removed to Tower Hill, in order to be near the guard, and within recent years it remained, as a warehouse, on the east side of Trinity Square, still retaining the benches upon which the seamen sat. On Tower Hill, also, were the Sick and Hurt Office, which dealt with the sick and maimed, and had officers at the ports, and the Receiver's Office, charged with the receipt of sixpence a month, deducted from seamen's wages both in the Navy and the merchant service, for the support of Greenwich Hospital. That institution received superannuated seamen, and the "Chest," at Chatham, issued gratuities to the sick and maimed. The Trinity House, in Water Lane, examined the qualifications of navigating officers, and the Marine Office, at the Admiralty, administered the marine establishments. Finally, the Court of Admiralty, at Doctors' Commons, was charged with the trial of maritime offences, the Board of Longitude with the discovery of the longitude, and the Royal Naval Academy, at Portsmouth, with the education of youths for the service. The Transport Board, which for some time had offices at the Trinity House, abolished in 1724, was called into existence again in 1794, and, later, receiving charge of business connected with prisoners of war in 1796, and of the work of the Sick and Hurt Office in 1806, continued its operations until 1817, when its functions were transferred to the Commissioners of the Navy and of Victualling.[1]

[1] "The British Fleet." By Commander C. N. Robinson, R.N. Pp. 124-126.

CHAPTER II.

THE DEVELOPMENT OF ADMINISTRATIVE MEANS.

THE state of things which Lord St. Vincent encountered upon his acceptance of office under the Addington ministry in 1801 had grown up through a long series of years. The means at the disposal of the Navy Board had not developed with the vast business it was called upon to undertake. Commissioners of Inquiry appointed in 1785 reported that its constitution had remained unchanged for a century. The business allotted to the several Commissioners was altogether beyond their power to deal with, and most important affairs were unavoidably left to clerks who, "however honest and diligent, were not the persons who could properly be considered responsible to the public for what was done," and accordingly, by an Order in Council of June 8th, 1796, the Navy Board was instructed to carry on its work by committees. Some advantage resulted from this; but waste, extravagance, carelessness, and malversation still went on, and in the case of The King *v.* Owen and Mardle (July, 1801), the Attorney-General stated that the depredations upon the naval stores did not annually amount to less than £500,000. The gross corruption, profligate expenditure, and supine negligence that existed were familiar to Lord St. Vincent before his acceptance of office. "Nothing but a radical sweep in the dockyards," he wrote in January, 1801, "can cure the enormous evils and corruptions in them, and this cannot be attempted till we have peace."

The evil was truly immense, and no man was ever better fitted to deal with such conditions than Lord St. Vincent. He had reformed the discipline of the Navy, and had improved the organization of our ships and fleets, and he brought with him to the Admiralty an inflexible spirit that enabled him to deal with the mutinous spirit of the dockyardsmen as he had before dealt with a mutinous spirit afloat. Added to this, his stern integrity, if it gave him a character of severity, and a manner that was harsh at times, and peremptory, lifted him above the level of many of his contemporaries, and rendered him fearless in his conduct of affairs. Already, by the Order in Council of January 12th, 1792, an investigation of the departments had been commanded, and, after long delay, due to the urgency of the war, that investigation was at length undertaken. Rarely have greater abuses been laid bare. The Royal Commissioners appointed in 1803 to inquire into "irregularities, frauds and abuses practised in the Naval Departments and in the business of Prize Agency," presented thirteen reports (1803-6), which exposed a mass of iniquity and corruption almost incredible. They discovered a lack of controlling power in the Navy Board that laid open the way to vast peculation and fraud. Accounts both of cash and stores remained uncleared for years, and it was reported to Parliament that, at the end of 1805, the outstanding imprests amounted to upwards of eleven millions sterling.[1]

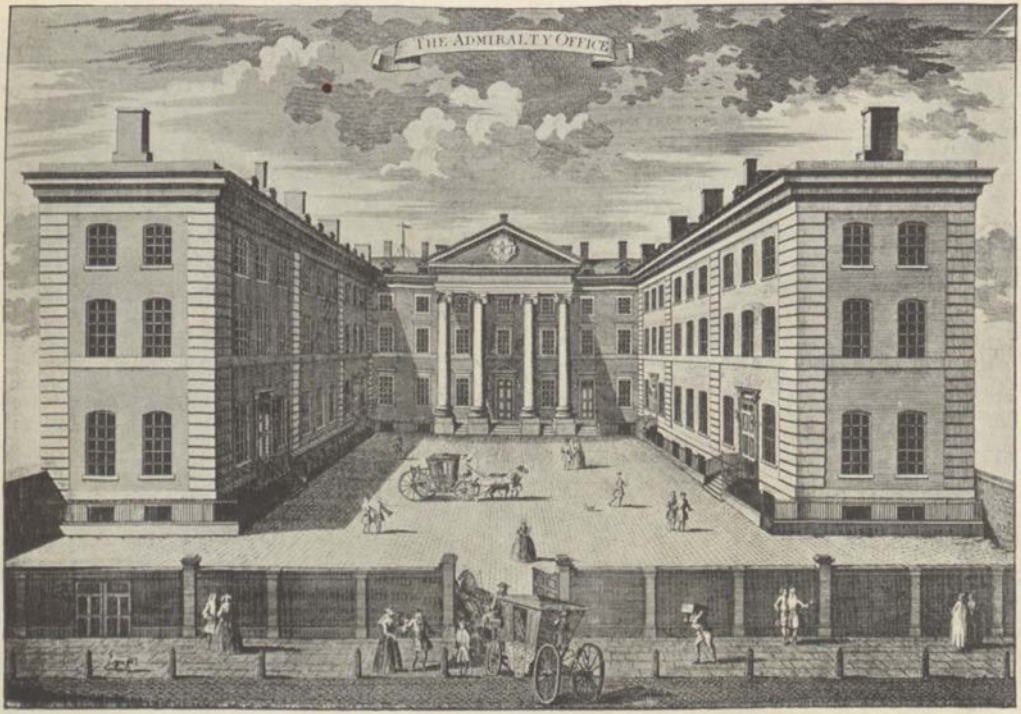
The sternness with which St. Vincent denounced the prevailing abuses, and suppressed the perfunctory inspection of the dockyards set on foot by the Navy Board, in order that he might himself from the Admiralty arraign the fraudulent and incapable, the vigorous spirit in which he exposed illegal gains, and attacked vested but dishonest

[1] Fourth Report of the Commissioners for Revising and Digesting the Civil Affairs of His Majesty's Navy, July, 1806 (printed April, 1809).

interests, with the swift manner in which he administered punishment, exposed him to a storm of violent hate and pitiless invective that would be hard to parallel. He had essayed a task even too great for himself, and Pitt, his political opponent, won over by the mortified spleen of disappointed spoliators, and by the shameless beings who resented St. Vincent's inflexible conduct of affairs, vainly attempted to fix upon him in the House of Commons, on March 15th, 1804, the responsibility for the state of things that then existed. His naval administration became the subject of violent attack, and he left office when the Addington ministry collapsed, followed by a storm of virulent and scurrilous abuse made public in an extraordinary pamphlet literature.

The friends of Lord St. Vincent were not silent. An illustration of their defensive methods may be seen in a very singular tract entitled "Memoirs of the Administration of the Board of Admiralty under the Presidency of the Earl of St. Vincent," of which a copy is in the Grenville Library, British Museum.[1] This tract is a vindication of St. Vincent, step by step, against "the base conspiracy of foes and rivals, of trembling guilt and aspiring ambition." "In happier times," says the writer, "some great and kindred virtue, some Patriot Minister, may catch his mantle, and, *with the concurrence of all his colleagues*, be able to carry the adze, or the torch into the heart of that black forest, too well guarded by the demons that inhabit it; into which the purity and virtue of modern times have only suffered the light to fall, but averted the flame, as if appalled and astounded by the fiends that yelled from its centre, and the monstrous forms that prowled in its recesses." "In the Dockyards and the civil offices of the Navy," concludes

[1] It is inscribed: "The whole of the impression of this tract, as I was assured by Mr. Justice Jervis (by whom it was given to me), was cancelled, *with the exception of this single copy.*"



THE ADMIRALTY OFFICE AT WHITEHALL, 1760 (BEFORE THE ERECTION OF THE SCREEN).

(From an engraving by D. Cunego.)

the writer, "we have groped our way, as we were able, by the casual coruscations and collusions of fraud with neglect, and of guilt with security;—and by the light of putrescence—by the lanthorn in the tail of the wriggling worm of peculation. Without a chart or a compass we have navigated the unexplored seas and streights of official plunder and contrivance, till we have arrived in the harbour and at the headlands of intense meridian ministerial iniquity, from which we observe the star of collusion pass through the line, the transit of corruption culminating in the Treasury."

Lord St. Vincent's Commission of Naval Inquiry paved the way for all the subsequent improvements in the Civil Departments of the Navy, though it was denounced at the time as a "drastic measure," and appears to have found no favour even with Mr. Marsden, the able Secretary of the Admiralty at the time of Trafalgar. His accomplished successor, Sir John Barrow, says that the Commissioners pursued their invidious task well and zealously. Their labours were more fruitful than those of the Commissioners for Revising and Digesting the Civil Affairs of the Navy, who presented thirteen reports on the various departments in 1806 and 1809. It was in this deplorable state of affairs that Lord Melville was appointed First Lord of the Admiralty. It was an office to which he brought both talent and aptitude, and he lost no time in pushing forward naval preparations, in such a way that we were able to fit out the fleets which brought us the victory of 1805. But Lord Melville had been too much associated with the civil affairs of the Navy in their darkest period, having twice been Treasurer, to escape suspicion in a time of keen scrutiny; and, upon the evidence adduced by the Commission of Naval Inquiry, he was impeached by Whitbread and "the elect of all the Talents," before the House of Lords (April, 1806). A trial lasting fifteen days led to his acquittal, though there can be little doubt that he had

been guilty of harmful negligence, and had acted contrary to the Act of 1785 "for better regulating the office of Treasurer of the Navy," which he himself had passed through the House.

The investigations of the beginning of the century were not to bear fruit until much later when Sir James Graham gave to our naval administration the form it now bears. Sir John Barrow and Sir John Briggs, Accountant-General of the Navy, and Secretary of the Commission of Naval Revision, 1806-9, lived to bear their part in the great reform. The recommendations of that Commission were, with some exceptions, carried into effect by Orders in Council in 1809, and thus some improvements were effected in the administrative machine. It was at this time that the Record Office within the Admiralty was established. It is unnecessary, however, to describe all the minor changes introduced under successive Boards of Admiralty. Many reductions were made with considerable economy, and the administration was otherwise improved through the visitation of the dockyards by the Admiralty, a practice reinstituted under the second Viscount Melville (First Lord, 1812-27) after having been dropped—save under St. Vincent—since the time of the Earl of Sandwich. To Lord Melville succeeded, as Lord High Admiral (May 2nd, 1827—September 18th, 1828)—an office never since revived and not likely to be revived—the Duke of Clarence, afterwards William IV., whose administration, with Admiral Sir George Cockburn as first of his Council, and Mr. John Wilson Croker as its secretary, maintained—not certainly without attack—the better traditions that had grown up in the conduct of our naval affairs. But the Lord High Admiral's Council was not an efficient machinery. "I am old enough to have seen the experiment of a Lord High Admiral tried," said Sir James Graham before the Select Committee on the Board of Admiralty in 1861. "I saw a naval officer, a prince of the blood, made Lord

High Admiral, with a Council, and I saw the working of it. It worked so ill that in the course of about eighteen months it came to a dead-lock, and the Duke of Wellington, no bad judge, and no bad administrator, was forced to abolish the office of Lord High Admiral and his Council, and to revive the Board of Admiralty under its present patent."

But the unwieldy character of the administrative machinery under the Admiralty on one hand, and the Navy Board and the Commissioners of Victualling on the other, still remained. When, however, Lord Grey took office in 1830, and Sir James Graham was appointed First Lord, it was anticipated that the reforms advocated by Earl St. Vincent would at length be carried into effect. Various Boards of Admiralty had debated whether the subsidiary Commissioners might not with advantage be merged in the Navy Board. But this was not enough for the new Cabinet. It was determined to do away with all divided control, and, abolishing the Board of Principal Officers and Commissioners of the Navy, and the Commissioners for Victualling, and for the care of sick and wounded seamen, to concentrate the whole of the civil departments under the Admiralty itself, each branch having an individual at its head. Sir James Graham did not mature his measures without full and anxious inquiry into the organization and working both of the civil departments and of the dockyards under them, and he had the great advantage of the counsel and assistance of Sir John Barrow, whose long and ripe knowledge of our naval administration, then for nearly thirty years—as Second Secretary and Secretary of the Admiralty—peculiarly fitted him to advise. The "Act to amend the Laws relating to the Business of the Civil Departments of the Navy, and to make other Regulations for more effectually carrying on the Duties of the said Departments" (2 Will. IV. c. 40)—vesting in the Board of Admiralty

the powers of the Commissioners of the civil departments—provided, in place of the numerous comptrollers, deputy-comptrollers, and commissioners of the Navy, of victualling and of transports—then located at Somerset House—for the creation of five separate and independent responsible superintendents of departments, under the Board of Admiralty collectively, and the Lords of the Admiralty individually. These new officials were the Surveyor of the Navy, the Accountant-General, the Storekeeper-General, the Comptroller of Victualling and Transports, and the Physician of the Navy, whose title was altered in 1843 to that of Director-General of the Medical Department of the Navy.

By the dispositions thus taken the Board of Admiralty and the subsidiary departments acquired the united and flexible character they have to-day, that character which they possessed before the civil departments had attained their magnitude and semi-independence, and were yet closely in touch with the Admiralty, holding the means—when they exercised them—of controlling and supervising the business for which they were responsible. Once again that close organization for discussion of the conduct of affairs, which fall often under the care of several branches of the administrative machinery, had been built up. Great as was the advantage thus won, the reorganization brought a further gain in the considerable economy that was effected through the abolition of sinecures and redundant posts, which the existence of a complex set of individual branches had involved. Sir John Briggs, Accountant-General of the Navy, prepared, in June, 1834, a statement of the reductions that had been effected in the naval departments since November, 1830, from which it appears that an economy of £253,342 had been made. But the merit of the reorganization effected by Sir James Graham is not to be estimated by the pecuniary saving it made possible, but by the fact that it struck at the root of abuses of long and slow growth which endangered our naval efficiency. Sir

John Barrow, writing in 1847, said of the new system: "On the whole, I can venture to say with great confidence, and after the experience of fifteen years since the plan was put in operation, under half-a-dozen Boards of Admiralty, Whig and Tory, that it has been completely successful in all its parts; and the proof of it is, that no fault has been found with it, nor has any alteration of the least importance been required."[1] This is an opinion, confirmed by many others drawn from long experience at the Admiralty, that may be expressed with still greater confidence to-day.

Under the system that existed from the introduction of these reforms until the year 1869, the Board met sometimes daily, but at all times frequently during the week for the discussion and consideration of business. It consisted of the First Lord, with authority paramount and supreme, superintending and generally directing the work of the departments, with responsibility inseparable from such a position, and of four Naval Lords, of whom the first was the professional adviser of the First Lord, and a Civil Lord. The five subsidiary Lords specially directed and supervised the work of the five Civil Departments, which were under as many permanent "Principal Officers"—the Controller or Surveyor of the Navy, the Accountant-General, the Storekeeper-General, the Controller of Victualling, and the Director-General of the Medical Department. There were also two secretaries of the Admiralty Board—the First or Parliamentary Secretary, who attended the meetings and noted on every paper read the decision arrived at, and the Second or Permanent Secretary, who had general superintendence of the office. By the machinery thus created provision was made for the transaction of vast and complex business demanding subdivision of labour, and yet so interwoven in its common

[1] "Autobiographical Memoir," p. 424.

object and practical execution, that it called for ample means of discussion among the chiefs of departments, and for unity of general direction and control.

For nearly forty years the method of conducting Admiralty business was unchanged, but under Mr. Childers a new system was introduced, with the practical effect that the reforms of 1832 were partially and temporarily set aside. The fresh changes were laid down in a memorandum of December 22nd, 1868, given effect to by an Order in Council of January 14th, 1869. It was felt that the position of the Controller was anomalous and unsatisfactory, because, acting under the First Naval Lord, who was specially concerned with the efficiency and strength of the fleet, he was directed by the person most interested in increased expenditure, and yet who was the only member of the Board in a position to enforce economy. Accordingly the Board was reconstructed, and afterwards consisted of the First Lord, whose position was for the first time defined, responsible for the business of the Admiralty, and (as his assistants) the First Naval Lord, the Third Lord and Controller, the Junior Naval Lord, and the Civil Lord, with the Parliamentary and Permanent Secretaries. The First Naval Lord was responsible to the First Lord for business relating to the personnel and for the movement and condition of the fleet, and the Junior Naval Lord was his assistant. In the same way the Third Lord, in whom were now vested the duties of the Controller, was responsible to the First Lord for the material side of the Navy, and the Parliamentary Secretary, assisted by the Civil Lord, for the finance of the department.

By this disposition of affairs the flexible character of the administrative machinery was impaired. Literally construed, the Order in Council fixed the distribution of business, restricted each Lord to that assigned to him, and practically rendered the meetings of the Board valueless. As a matter of fact, the Board meetings, which had been

249 in 1866, fell to 33 in 1870, and of these none lasted more than half an hour—many of them much less. Thus the constitution and usage of the Board were entirely changed, and affairs soon became greatly embarrassed. In the absence of meetings for discussion, decisions were arrived at seriously affecting the Controller's business in his absence, and without the hearing of his objections. In the next chapter I shall take occasion to refer to Mr. Childers' minute on the loss of the *Captain*. But the most serious effect of the reconstitution of the Board was to reduce the naval element within it, and Mr. Childers himself, recognizing the want, said to Sir Sydney Dacres on the day when the Russian note arrived, "Recollect that the first thing which must be done is to put another Naval Lord into the Admiralty." At this time a temporary office of "Chief of the Staff" was created, the Contract and Purchase Department was formed, taking the duties connected with the purchase and sale of stores, executed by the late Storekeeper-General and the Controller of Victualling, and the Store Department was transferred to the Admiralty at Whitehall and placed under the Controller. I may here say that the location of the Civil Departments at Somerset House was a serious disadvantage, and that their transference to the Admiralty and Spring Gardens by Mr. Childers proved greatly beneficial.

The changes introduced at this time into the working of the Admiralty were condemned by many witnesses before the Select Committee of the House of Lords deputed to inquire into the working of them in 1871, and Mr. Goschen, appointed First Lord on Mr. Childers' resignation, found it necessary to modify the system. All the Lords were made directly responsible to the First Lord, but none were designated as his assistants, and a Second Naval Lord was appointed. The Controller lost his seat, though "retaining his right to attend the Board, and to explain his views whenever the First Lord shall submit to the Board, for their opinion

designs for ships or any other matter emanating from the Controller's Department," and remaining responsible to the First Lord for the material, with a permanent Deputy Controller. At the same time a Naval Secretary was added to the Board. The Board now resumed its consultative function, and the work was divided into three principal sections, the three Naval Lords taking charge of the personnel and the movements of the fleet, the Controller, as has been said, of the material, and the Parliamentary Secretary of the finance; while the Civil Lord and the two other secretaries assumed any duties assigned to them. These changes were embodied in the Order in Council of March 19th, 1872. In the same year steps were taken to bring the First Naval Lord and the Controller into closer relations, and the position of the Parliamentary and Financial Secretary was strengthened by his being empowered to sign, in lieu of one of the Lords, all orders for payment of money. In November, 1877, the office of Permanent Secretary was abolished, the duties being merged with those of the Naval Secretary, but, by an Order in Council of March 10th, 1882, this arrangement was reversed, a revived Permanent Secretary displacing the Naval Secretary.

A further reorganization of the Board took place by virtue of the last-named Order, the Controller resuming his seat, with an additional non-parliamentary Civil Lord, "possessed of special mechanical and engineering knowledge, as well as experience in the superintendence of large private establishments," as his assistant. In 1885 this new appointment was abolished, and, in the same year, the Accountant-General of the Navy was appointed to act as deputy and assistant of the Parliamentary and Financial Secretary. He was charged with the preparation of the Navy Estimates, with the financial review of expenditure under the estimates, with advising and deciding as to any redistribution of votes or transfers, with satisfying

himself that expenditure was properly allowed and brought to account, and with advising on all questions of naval expenditure, and was to be regarded "as the officer to be consulted on all matters involving an expenditure of naval funds."

This somewhat tedious survey of the recent changes in our naval administration has been necessary to an understanding of the constitution of the Admiralty Board and of the methods of its working, which will be described in this volume. The dominant characteristic of our administrative machinery, as I have said, is the flexibility with which it operates, and the rapidity with which it can act. The Admiralty Board draws this great advantage from the fact that it has developed historically as the representative of a single individual, without the evils that would beset such an administration. The advantage was jeopardized or temporarily lost when the civil departments grew so great that they escaped control, and again when Mr. Childers essayed to regulate the work by what Sir Spencer Robinson described as "cast-iron rules." The system of the Board is probably not without some disadvantages, but, as Lord George Hamilton said before the Royal Commission on Civil Establishments, 1887, "it has this advantage, that you have all departments represented round a table, and that if it is necessary to take quick action, you can do in a few minutes that which it would take hours under another system to do." "The constitution of the Board of Admiralty," said the report of that Commission, "appears to us well designed, and to be placed, under present regulations, on a satisfactory footing." The personal communication it provides for "tends to a proper understanding between the head and his subordinates, it fosters personal responsibility, and it leads to the simplification of work and reduction of unnecessary correspondence." It secures, moreover, a proper relation between the executive and civil functions, and, in this respect, as

Mr. Campbell Bannerman said, in his addendum to the Further Report of the Hartington Commission, 1890, the Admiralty Board is "a model to be copied."[1]

[1] Some account of the places and buildings in which the work of the Admiralty and Navy Boards has been carried on will be found in Appendix I.

SAMUEL PEPYS

(Clerk of the Acts and Secretary to the Admiralty, 1660-1689).

From the Painting by G. Kneller in Magdalene College, Cambridge.

CHAPTER III.

THE ADMIRALTY PATENT AND THE RESPONSIBILITY OF THE FIRST LORD.

THE reader of the foregoing chapters will not have failed to remark that there are peculiarities in the constitutional position of the Admiralty, and a little investigation will show us that the legal origin of the powers exercised by the First Lord, and by the Board itself, present an interesting and instructive study. It was remarked in that part of the Preliminary Report of the Hartington Commission, 1889, which deals with the internal administration of the Admiralty—and I have already adverted to the fact—that the Admiralty is not administered in accordance with the Patent which gives it warranty to act. Under the Patent full power and authority are conferred upon "any two or more" of the Commissioners "to do everything which belongs to the office of Our High Admiral," but, in practice, under the Order in Council of March 19th, 1872, the First Lord is made "responsible to Your Majesty and to Parliament for all the business of the Admiralty," and the Naval Lords are made severally responsible to the First Lord for the administration of the business assigned to them. It was in the Order in Council of January 14th, 1869, that this sole responsibility of the First Lord was first officially laid down, but the evidence given by the Naval and Civil Lords before the Select Committee of the House of Commons in 1861 clearly shows that this was but a formal sanction to a practice that had existed long before.

Here, then, is an anomaly which our historical inquiry should enable us better to understand. Dr. Stubbs has confessed that the history of Admiralty jurisdiction is obscure. I shall not find occasion in this volume to deal with the civil jurisdiction of the Admiralty Court (from which the criminal jurisdiction was taken away in 1844), but I may remark that this obscurity clouds that jurisdiction not more than the executive authority of the Admiralty itself.[1] Sir James Graham, who made it his business to inquire into the character and legal origin of the powers vested severally in the First Lord and the Board, came to significant conclusions illustrative of that historical development of the Admiralty which gives it its dominant merits. "The more I have investigated the matter," he said before the Select Committee of the House of Commons, 1861, "the more I am satisfied that, like the common law in aid of the statute law, the power exercised by the Board of Admiralty and the different members of it, rests more upon usage than upon the Patents, uninterrupted usage, from a very early period." Ten years later, before the Select Committee of the House of Lords, Mr. Bristow, solicitor to the Admiralty, described this judgment as "excessively good sense." It is, indeed, clear that not a tithe of the power exercised by the Board is conferred upon it, in express terms, by the Patent, and the Patent itself is remarkable as conveying powers by reference to antecedent usage. Further, it is clear that the powers of the Lord High Admiral

[1] For the civil and criminal jurisdiction of the Admiralty Courts see: "The Maritime Dicæologie," 1664; Twiss, "The Black Book of the Admiralty;" Nicolas, "History of the Navy;" Shortland, "Laws which Govern the Navy;" Thring, "Criminal Law of the Navy;" Robinson, "The British Fleet," part ii., chap. v.; Marsden, "Select Pleas in the Court of Admiralty" (Selden Society, 1895), dealing with the Court of the Admiralty of the West, 1390-1404, and the High Court of Admiralty, 1527-45.

himself, and of the local admirals who preceded him, were exercised by virtue of usage and of the power exercised by the crown in maritime affairs.

We may therefore conclude that there existed antecedent to the Admiralty Patents, and now concurrently with them exists, an elastic and undefined power, based upon usage, which makes it possible for the First Lord—as I shall presently illustrate—to undertake any duties the public safety may require. He is possessed of the utmost authority a single minister can exercise, with the advantage, as Sir James Graham pointed out, of ubiquity in cases where it is required that general instructions should be given to act, whereby a power of expansion is exemplified capable of meeting exigencies that no single minister could possibly exercise. The usage which covers these powers is expressed in the declaratory Act of the 2nd of William and Mary, sess. 2, c. 2, which affirms that "all and singular authorities, jurisdictions and powers which by any Act of Parliament, *or otherwise*, have been and are carefully vested, settled and placed in the Lord High Admiral of England for the time being, have always appertained to, and of right might have been, and may and shall be had, employed and exercised, and executed by the Commissioners for executing the office of High Admiral of England for the time being according to these Commissions, to all intents and purposes as if the said Commissioners were Lord High Admiral of England."

The Patents of the Admiralty Board, as I have said, falling back upon the Patents of the Lords High Admiral, find their early type in that which Henry VI. granted to the Earl of Warwick. They have been granted, with little actual change, to a long series of successive Boards, and the Patent of Queen Anne, save for certain small alterations, omissions and additions, is textually that of Queen Victoria. One change, however, deserves to be noticed. In the Patent of Queen Anne the grant is to "any three

or more of you;" it is now, and for a long time has been, to "any two or more of you." The authority for the substitution of two Lords for the three formerly required to legalize any action of the Board is contained in the Act 2 William IV. cap. 40. This was an extension of powers conferred by an Act of 3 George IV., authorizing two Lords to sign so long as the Board consisted of less than six members. The reduction in number was, therefore, evidently due to a purpose of saving time and labour in signing, and to avoid any difficulty in finding three Lords at all times. In those days so very many things had to be signed by their Lordships, that it is easily conceivable there must, on occasions, have been much difficulty in keeping the necessary number of Lords in waiting. But, generally speaking, the Patent continued, save for names and descriptions, a document *verbatim et literatim* the same, and contained obsolete references to vanished Droits of the Admiralty, and to portions of Her Majesty's dominions which no longer existed, and were not easily identified on the map. These obsolete features, with certain exceptions, were removed in 1872, and the Patent has been simplified, but it is interesting to note, as an illustration of their little changing character, that the early Patents of Her Majesty conferred the powers of "Our High Admiral of the United Kingdom of Great Britain and Ireland, and of the Dominions, Islands and Territories thereunto belonging, and of our High Admiral of Jamaica, Barbadoes, Saint Christopher, Nevis, Montserrat, Bermudas, and Antegoa in America, and of Guiney Binny in Africa, and of the Islands and Dominions thereof, and also of all and singular Our Foreign Plantations, Dominions, Islands, and Territories whatsoever and places wheresoever thereunto belonging."

The grants of the Patent now fall into eight main parts. The first gives power to execute the office of High Admiral. By virtue of the second the Commissioners are to issue

orders for the building, repairing, and fitting of ships, and to establish wages for the men employed. The third commands the officers of the Navy and naval departments to be obedient to the Commissioners. The fourth charges the Commissioners to propound orders and instructions for the better regulation of the service. The fifth relates to the Droits of the Admiralty. By virtue of the sixth the Commissioners are empowered to appoint the now extinct Vice-Admirals, who were formerly local representatives of the Lords High Admiral, and the seventh gives them warrant to appoint officers to conduct the Civil Departments. The eighth part confers the authority to make contracts, and the Patent now concludes by vesting in the Admiralty Commissioners the powers of the extinct Principal Officers and Commissioners of the Navy and of the Victualling Commissioners. The text of the Patent is as follows:—

"Victoria by the Grace of God of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, Empress of India. To Our right trusty and well beloved Councillor, A.B., Our trusty and well beloved C.D., E.F., G.H., and I.K., greeting. Whereas we did by Our Letters Patent under the Great Seal of Our United Kingdom bearing date at the day of in the year of Our reign, constitute and appoint the persons therein named to be Our Commissioners for executing the office of Our High Admiral as therein mentioned during Our pleasure. Now know ye that we do by these presents revoke the said Letters Patent. And further know ye that we trusting in your wisdom and fidelity of Our especial grace do by these presents constitute and appoint you to be Our Commissioners for executing the office of Our High Admiral of Our United Kingdom, and of the Territories thereunto belonging, and of Our High Admiral of Our Colonies and other dominions, whatsoever, during Our pleasure. Granting unto you or any two or more of you, full power and authority to do everything which belongs to the office of Our High Admiral, as well in and

touching those things which concern Our Navy and Shipping as in and touching those which concern the rights and jurisdictions appertaining to the office of Our High Admiral. And We do grant unto you, or any two or more of you, full power and authority to make orders for building, repairing, preserving, fitting, furnishing, arming, victualling, and setting forth such Ships, Vessels, and Fleets, with all things belonging to them as to you, or any two or more of you, according to your best discretion shall seem fit; and also to establish and direct such entertainments, wages, and rewards for and unto all such persons as are employed in any of Our services under you or in anything appertaining thereunto, and to give such discharges for those services, or any of them as to you or any two or more of more of you, with the consent of the Commissioners of Our Treasury in all cases where such consent has heretofore been required, shall seem fit. And We do command all Our Officers of Our Navy and all others in any Department of Our Naval Service that they be from time to time attendant to you, and do observe and execute all such orders as you or any two or more of you give touching Our Naval Service. And Our will and pleasure is that you, or any two or more of you, do from time to time propound unto Us such ways and means for the establishing such orders and instructions for regulating Our Navy as shall be found agreeable to Our Service, and as may increase Our power and forces by sea, and remove such defects and abuses as may prejudice the same, and especially may keep the Mariners in good order and obedience, to the end that thereupon we may take speedy and effectual course for the supplying of all defects and reforming of all abuses. And whereas all wrecks of the sea, goods, and ships taken from pirates, and divers rights, duties, and privileges have been by express words or otherwise heretofore granted to Our High Admirals for their own benefit as duties appertaining to the office of Our High Admiral. It is Our will and pleasure that all casual duties and profits be taken and received in all places where they shall happen by the officers of the Admiralty or other proper officers appointed as by law required in that behalf, in such sort as they formerly were or ought to have been taken and received when there was a High

Admiral, or as they now are or ought to be taken and received; and the officers so taking or receiving the same shall account for the same and every part thereof to the proper officers appointed in that behalf, and the same shall be applied in such manner as the law directs. And whereas all offices, places, and employments belonging to the Navy or Admiralty, are properly in the trust and disposal of Our High Admiral, and our High Admirals have constituted Vice-Admirals under them. Now Our will and pleasure is that all such officers, places, and employments, as shall become or be made void during the vacancy of the office of Our High Admiral shall be given and disposed of by you or any two or more of you. And you or any two or more of you may constitute Vice-Admirals for such places where Vice-Admirals have been usually appointed by Our High Admiral for the time being, or where you may in your discretion from time to time think fit. And know ye further that we do grant unto you full power and authority from time to time by warrants under the hands of any two or more of you, and the seal of the office of Admiralty, to appoint such officers for conducting the business of the Civil Departments of our Naval Service, and for superintending our Naval Arsenals, Dockyards, Victualling Establishments, and Naval Hospitals within Our United Kingdom or elsewhere, as to you shall seem necessary, and from time to time, as you shall see fitting, to revoke the appointments of any such officers, and appoint others in their stead, strictly enjoining all such officers, and all others whom it may concern, to be obedient to you in all things as becometh. And, moreover, we grant unto you, or any two or more of you, full power and authority to make or cause to be made on Our behalf, all requisite contracts for the hire of vessels and for the supply of Naval, Medical, and Chirurgical Stores, and of victuals, provisions, and other necessaries for Our Fleets and Naval Service, and for the performance of works in relation thereto, and for any other services as in your discretion shall be from time to time found necessary for the better carrying on of Our Naval Service; and generally to execute and do every power and thing which formerly did in any respect appertain to the office or duties of Principal Officers and Commissioners of the Navy and of Commissioners for Victualling the

Navy, and for the care of sick and wounded seamen in the Service, or which they or any of them collectively or individually, as such officers and Commissioners, could have lawfully executed or done. In witness whereof we have caused these Our Letters to be made Patent. Witness Ourself at Westminster, the day in the year of Our reign.

"By warrant under the Queen's Sign Manual."

The instruments by which the Patent is, in terms, overruled upon the question of responsibility are the Orders in Council of January 14th, 1869, and March 19th, 1872, but these, as I have said, merely give formal sanction to long pre-existent practice. The First Lord is made responsible to the Queen and Parliament for all the business of the Admiralty, and the other Lords and the Parliamentary Secretary are made responsible to the First Lord for the business with which they are charged, each in his own department, though his responsibility is not easy to define. It is almost impossible to define the responsibility of the Permanent Secretary.

The question has often been mooted whether it would not be well to bring the Patent into harmony with the usage expressed in the Orders in Council, but against this there is a very decided consensus of the best opinion. Sir James Graham, who fully recognized that, whatever the Patent might be, the Board of Admiralty could never work unless the First Lord were supreme, was nevertheless of opinion that there would be great danger in attempting to touch the Patent, and this is the opinion of our best constitutional lawyers. Admitting the highly beneficial elastic power possessed by the Admiralty Board under the Patent, and the prompt and flexible character of the business methods that results, the reasons for leaving the sanctioning instrument intact are obvious. *Expressio unius exclusio alterius.* Sir James Graham, who held a very exalted view concerning the sole and supreme authority of the First Lord, said, before the Select Committee of the House

of Commons, 1861: "If you pass a new Patent, everything which you omit will be held to be superseded, everything which you do not include in terms will be held not to be granted, which is exactly the inverse of the present state of affairs; the Patent of the Board of Admiralty, in direct terms, gives very little to the Board." It would, in short, be impossible to convey and define by Patent the authority, powers, and character of the Board, for the reason that these themselves are, in fact, incapable of precise definition.

Quite apart from the circumstance that the far greater part of the Admiralty business is conducted outside the Board—in a manner to be explained when I come, at the close of the volume, to describe the working of the Admiralty machine—there appears to be, in certain exceptional acts regarding the work of the Navy, a direct government without a Board. Thus, when Lord Gambier was sent to Copenhagen in 1807, he was instructed to obey all orders from the King, through the Principal Secretary of State for War, and in this way he received orders to attack Copenhagen, which were unknown to all but the First Lord. In a similar way the Secretary was despatched to Paris in 1815, with instructions to issue orders as if from the Admiralty, when directed to do so by the Foreign Secretary, who accompanied him; and these orders resulted in Napoleon's capture. These instances were cited by Sir James Graham before the Select Committee of the House of Commons, 1861, in order to illustrate the elastic power under the Patent which enables the First Lord to undertake any duties the public safety may require. The promptitude with which Lord Barham acted on receipt of the news brought by the *Curieux* from Lord Nelson, when following Villeneuve home, is another illustration of this elastic power. An abundance of other examples might be cited to prove that procedure dictated by high policy has often been given effect through the supreme authority

vested in the First Lord, without the intervention of his colleagues, though almost invariably with their knowledge.

It is not surprising that this feature of Admiralty methods, combined with the fact that much business is conducted by individual Lords under the First Lord's direction, should have led many to question the value of the Admiralty as a Board. This was a view somewhat accentuated after the definition of the First Lord's sole responsibility in 1869. Thus Mr. Vernon Lushington, Permanent Secretary to the Admiralty, expressed the opinion before the Select Committee of the House of Lords in 1871, that the Board answered no good purpose. He did not like a Board that existed for merely formal ratifying purposes, considering it absolutely detrimental to the public service that a Board which did nothing, and took no responsibility, should be the authority under which orders were finally issued. Mr. Baxter, too, the Parliamentary Secretary, regarded the Board as "a fiction" not worth keeping up, and would have abolished it altogether.

The Order in Council of 1869, by describing the Lords of the Admiralty as the "assistants" of the First Lord, and by specifically defining their duties, had, in fact, partially disabled the Board.

An illustration of this—throwing some light upon the difficulties that attend the definition and distribution of responsibility—was the action taken by Mr. Childers, First Lord, in relation to the loss of the *Captain* in 1870. The court-martial had expressed the "conviction" that the ship had been built "in deference to public opinion expressed in Parliament," and through other channels, and in opposition to the views and opinions of the Controller and his department, and that the evidence all tended to show "that they generally disapproved of her construction." Mr. Childers thereupon, on November 30th, 1870, issued a minute with the authority of the

Board, but which had never been brought before the Board, wherein the professional reputation of Sir Spencer Robinson, a Lord of the Admiralty, and Controller of the Navy, was considered to be impugned. In short, and in the words of the draft report of the House of Lords' Committee in 1871, "Mr. Childers, being himself nominally responsible for sending this vessel to sea, constituted himself a judge of the case, and, exempting himself from all blame, distributed censure among a number of persons, while he placed the chief weight on the Controller, who had been by a former Board specially released from this responsibility."

This unique case contributed largely to reinstate the Board in its former position, and to bring about the subsequent reorganization of the Admiralty. The legal view as to the inutility of the Board had never found favour with the Lords of the Admiralty nor with naval officers, and is probably now altogether abandoned. Those who know the inner working of our naval administration best, recognize the high value of the consultative functions of the Board, which brings together the highest professional opinion for the guidance of the First Lord, and, enabling its members to discuss every question among themselves, greatly benefits the service by the free interchange of those ideas which build up our naval policy, and lead to the means for carrying it into effect.

As I have said, the question of final responsibility is not in all respects clear. It has been discussed before several Parliamentary Committees. Sir Charles Wood, a former First Lord, said, in 1861, that he had never read the Patent nor heard of anyone having read it. He had been guided by the "prescriptive usage, which is a sort of tradition in every office," and he considered the responsibility of the First Lord to the Crown and to Parliament to be direct and absolute, and that the First Lord was *singly and personally* responsible for the sufficiency of the

fleet which involved the safety of the country. This had been the view of Sir James Graham. It was not, however, shared by Sir Arthur Hood, First Naval Lord, who expressed the view, before the House of Commons Committee in 1888, that in the matter of the sufficiency of the fleet the Board collectively are responsible. Sir Anthony Hoskins regarded the First Lord as "absolutely responsible for everything," but somewhat modified this view by saying that the Board collectively, some Lords more, some less, are responsible for the designs of ships. It is unnecessary to pursue the question of responsibility further. What is clear is that the First Lord being responsible, the other Lords are responsible to him for the advice they give; and Sir Evan MacGregor, Permanent Secretary, has expressed the view that their responsibility ends when they have given their opinion at the Board to the First Lord.[1]

[1] The particular Orders in Council which, with the Patent given in this chapter, are the instruments under which the Admiralty is administered, will be found in Appendix II.

JOSIAH BURCHETT

(Joint Secretary and Secretary of the Admiralty, 1695-1742).

CHAPTER IV.

THE EXISTING ORGANIZATION.

THE existing constitution of the Board of Admiralty is regulated by the Order in Council of March 19th, 1872, modified by that of March 10th, 1882, which involved the re-inclusion of the Controller as a member of the Board, and the suppression of the Naval Secretaryship, as well as the addition of a Civil Lord with special mechanical and engineering knowledge, whose office has not been filled up since the resignation of Mr. G. W. Rendel in 1885. The Board of Admiralty is thus comprised of:

The First Lord The First Sea Lord The Second Sea Lord The Third Lord and Controller The Junior Sea Lord The Civil Lord	Commissioners for executing the office of Lord High Admiral.

The Parliamentary and Financial Secretary.
The Permanent Secretary.

The First Lord is responsible to the Crown and to Parliament for all the business of the Admiralty, and commits carefully defined duties to the other Lords and the Secretaries. The First Sea Lord, the Second Sea Lord, and the Junior Sea Lord are responsible to the First Lord for so much of the business relating to the personnel of the Navy and the movements and condition of the fleet as is

confided to them; the Controller is responsible in the same way for the material of the Navy; and the Parliamentary Secretary for the finance and other business with which he may be charged; while the Civil Lord and Permanent Secretary have each special duties assigned to them by the First Lord. Within the lines laid down by the Order in Council the distribution of business among the Lords is an internal disposition of the Admiralty, in the discretion of the First Lord, who commonly, upon taking office, discusses the question at the Board and passes the distribution arranged, which varies little, as a Board minute.

The First Lord of the Admiralty.—The responsible head of the naval administration is the Cabinet Minister known as the First Lord of the Admiralty, who, as a member of the Government, is the channel through which the Navy receives its political direction, and, through successive First Lords, is shaped in character and strength in accordance with imperial policy. The constitutional position of the First Lord was dealt with in the last chapter. Being responsible for all the business of the Admiralty, he possesses the power both of initiative and veto. By his supreme direction our maritime affairs are conducted. He is the representative of the Navy in Parliament. To him the country looks for its readiness and sufficiency.• In practice, as a civilian, the First Lord depends very largely upon the other Lords. In the view of Lord George Hamilton, indeed (First Lord, 1885-1892), his responsibility to Parliament consists largely in seeing that competent and efficient men have certain duties assigned to them under him. He is responsible for the Admiralty as the Premier is for the Cabinet, or as the admiral commanding a fleet is responsible for that fleet. No responsibility would attach to that admiral for a collision between ships which did not result from his orders or from the want of them. If the naval advisers of the First Lord upon

the Board do not approve his policy, it is their responsibility to advise him, and, if their advice be not accepted, they have the remedy of protest or resignation. But, inasmuch as the First Lord has selected or accepted his advisers as the most able of professional men, he is very largely guided by their views. Sir Arthur Hood (Lord Hood of Avalon), First Naval Lord, who had had a long experience of the Admiralty, was, indeed, able to tell the Select Committee on the Navy Estimates, 1888, that he could not recall a single instance in which a First Lord had vetoed any important question which had been placed before him, contrary to the views of the Naval Lord who had been charged with those administrative duties.

Within recent years something has been done by First Lords towards affixing responsibility upon the individual members of the Board, by more clearly defining their duties, still as an internal regulation of the Admiralty subject to change, and alterations have been made to secure that end. Lord George Hamilton laid down a rule that no member of the Board was to write a paper outside his own department, and circulate it, until it had first come to him as First Lord for decision as to whether or not that paper should be sent to other members of the Board. But the right of the Lords to see the First Lord whenever they wished it remained, and remains, and this disposition does not derogate from the authority and influence they exercise.

In addition to the general direction and supervision of all business relating to the Navy, and of the political questions that concern it, the First Lord, as will be seen, deals with all Board matters, and the internal regulation of the Admiralty. He has special charge of promotions and of removals of naval and marine officers from the service, and of all questions relating to honours and rewards. With him also remain the appointments of flag officers, captains, officers commanding ships, commanders to the

coastguard, and the superior officers of the medical service, staff appointments to the Royal Marines, and civil appointments and promotions, except such as are provided for under the Controller and the Civil Lord, with the nomination to naval cadetships and to assistant clerkships of the Navy. Upon these or other points he is free to obtain the opinion of one or all of his advisers.

The First Sea Lord.—Sir James Graham, while holding the First Lord to be responsible for every act, and that he could not shelter himself under any advice, spoke of the Senior Naval Lord as his "first naval adviser," and Mr. Childers and Lord George Hamilton regarded this Lord as exercising "functions almost similar to those of the Commander-in-Chief of the Army." The former view, in my opinion, is correct. Although in theory the First Sea Lord is responsible for the personnel of the fleet, as distinguished from the material, in practice this is not so; for he is concerned with the material as soon as it is put in commission, and with the actual commissioning of it. In short, his work is chiefly in relation to the employment of the fleet, though he exercises great weight in regard to the character and sufficiency of it; and his advice is always sought, with that of the other Naval Lords, upon questions of ship-building policy, in relation to which he may initiate suggestions. Sir Arthur Hood regarded the consultation between the First Sea Lord and the Controller upon plans of ships furnished by the Chief Constructor in accordance with the orders of the Board, as the "first vital step" in the ship-building procedure, one Lord bringing to the discussion knowledge of the fighting requirements of ships, the other technical competence, through his advisers, in matters of naval construction. It will thus be seen, as a broad definition of the First Sea Lord's duties and authority, that they cover the fighting efficiency and actual employment of the fleet. Upon him, and upon the Controller, the naval business is very largely centred, and

his influence upon the naval councils of the country is of the highest importance.

The special duties assigned to the First Sea Lord have to do largely with ships in commission and their movements, and with the distribution (or war disposition) and organization of the fleet. It is his particular province to advise upon questions of maritime defence and naval strategy as influencing policy. He has general supervision of the mobilization of the fleet, both personnel and material, and of the Intelligence Department. He appoints commanders (second in command) and takes charge of matters concerning gunnery and torpedoes, as relating to personnel and ships in commission. Another very important part of his duty is to supervise the discipline of the fleet; and Sir Frederick Grey, in 1871, said that this work occupied a large part of his time. The duty involves charge of courts-martial and courts of inquiry, with punishment returns; and the minutes of courts-martial pass upward to him with the remarks of the Junior and Second Sea Lords, and are considered, before being submitted to the First Lord. Another important matter within the special province of the First Sea Lord is the protection of trade and of fisheries. The Hydrographical Department and pilotage are under his supervision, and he deals with signals, collisions, the slave trade, prize questions, and leave to officers and men, with the movements of, and orders to, naval *attachés*. It is a great and complex business, demanding the closest personal attention, but knowledge of it by the First Sea Lord, as chief naval adviser, is necessary; and, aided by the constant personal contact of members of the Board, successive holders of the office have found it possible to devote adequate attention to the duties.

The Second Sea Lord.—Like the other Lords of the Admiralty, the Second Sea Lord is subordinate only to the First Lord, though his work, in certain matters, is closely

related in a secondary degree to that of the First Sea Lord. Many very important matters are in his charge, but none more so than the manning of the fleet, and the education and training of the personnel, with the affairs of the Royal Marine Light Infantry and Royal Marine Artillery. Within his department fall the training establishments, including those for engineer students, the naval colleges, and the education of officers, and of men and boys for the Navy, as well as the Royal Marine Schools, except in regard to civil appointments. He appoints navigating officers and lieutenants, except to commands, and sub-lieutenants, midshipmen, cadets, engineer officers, gunners, and boatswains, and supervises the officers and men of the Steam Reserve. The mobilization of the personnel of the fleet, the pensioners, and the reserve men, and therefore the affairs of the Coastguard (except in regard to buildings), and the Royal Naval Reserve are in his province. He deals further with engine-room artificers and with interpreters, as well as with the award of medals. Another important duty is in regard to deserters and the removal of men who have run. The duties assigned to the Second Sea Lord make him the constant colleague of the First Sea Lord, in whose temporary absence he should be able to conduct the administrative affairs of the latter. A happy illustration of the facility of business which distinguishes the work of the Lords of the Admiralty from that of the heads of departments is to be found in the relations which existed between Sir Frederick Grey and Vice-Admiral Eden, when they were First and Second Sea Lords respectively. Called to constant personal communication upon such matters as the complements of ships and the manning of the fleet, of which they were severally superintending Lords, and meeting for frequent discussion at the Board, each knew intimately the other's work (as they explained to the House of Lords Committee in 1871) and upon occasions could take charge of it with perfect

confidence. Such freedom of personal communication between the Lords is essential to the Admiralty system.

The Third Naval Lord and Controller of the Navy.—The Controller of the Navy, at one time known as the Surveyor, though an officer of long standing, representing the Comptroller of Henry VIII.'s days, is a comparatively recent addition to the Admiralty Board. He first took his seat—being made a Lord owing to the anomaly of his position in regard to control of expenditure—under the Patent of December 18th, 1869, with charge of the departments of Construction, Stores, and Ordnance, but lost it again in 1872, and resumed his place at the Board upon the reconstitution of 1882. His duties are of very great importance in relation to the material of the fleet, comparable to those of the First Sea Lord in regard to the personnel, and he is the directing Lord of a number of most important civil branches of which I shall have to speak when I deal with the "machinery" of naval administration. Under the Controller are ranged the whole of the means by which the material elements of the fleet are created and maintained in a state of efficiency; but, inasmuch as this volume does not deal with the detailed and practical work of the dockyards and other local establishments, the ultimate reach of the Controller's superintendence extends beyond its scope. The work of his department may be explained best under five heads, of which the first is the design and construction of ships and machinery; the second, naval armaments; the third, dockyard administration and work; the fourth, naval stores; and the fifth, dockyard expense accounts.

The Controller submits proposals in regard to the designs of new ships, upon which decision of the Board is necessary, and superintends the preparation of plans. He is responsible for the carrying into effect of the decisions of the Board regarding ships built and building, including masting, torpedo, electrical, and all nautical

apparatus. He surveys ships in progress at the dockyards, and in private yards, in order to see that they are according to design and the decisions of the Board, and to his own satisfaction. No alteration can be made in a ship built, or building, without his authority, and the sanction of the Board. He also surveys merchant vessels for acceptance as auxiliary cruisers, and submits annual estimates for ships and machinery to be built or obtained by contract, for use in preparing the Navy Estimates; and he is responsible for the design and manufacture by contract of steam machinery for ships and boats. Here the Director of Naval Construction and the Engineer-in-Chief are his lieutenants.

In the same way, in regard to armaments, it is his duty to see that the decisions of the Board touching the gunnery and torpedo armament of ships are carried out, and to him are submitted all important questions relating to ordnance and torpedo material which concern the design and construction, repairing and fitting of ships, their guns, and gun and torpedo mountings and fittings, magazines, shell-rooms, and electrical apparatus. In this department the Director of Naval Ordnance is the Controller's assistant. The Director of Dockyards, acting under the Controller's responsibility, assists him in regard to the management, work, and machinery of the dockyards at home and the naval yards abroad, in the building of ships and boats in the dockyards, and the maintenance of ships and machinery in a state of efficiency. The Controller is also responsible for purchasing the plant and machinery of the Victualling Yards, and supervises the Director of Dockyards in his work of preparing the programme of work to be done in the dockyards, and regulating the number, appropriation, and pay of men, and the appropriation of materials in accordance with approved programmes. To the Controller, also, falls the care of estimates for plant and machinery

for the dockyards and other establishments, and he submits proposals for the extension and repair of buildings and other works carried out in the yards by the Director of Works. The Director of Stores, under the Controller's authority and responsibility, maintains the supply of naval stores and of shipbuilding materials for the dockyards and depôts at home and abroad, prepares estimates for stores for the purposes of the Navy Estimates, and examines the store account of ships, the last being a duty transferred from the Accountant-General. Through the Inspector of Dockyard Expense Accounts the Controller is responsible for the keeping of accounts of dockyard expenditure, and for seeing that outlay is charged as directed; also for the preparation of shipbuilding and manufacturing expense accounts of the yards for submission to Parliament. In regard to the Estimates, the Controller, through his subordinates, is responsible for the preparation and administration of Vote 8 (save some sub-headings) and Vote 9, and thus, in 1894-95, for the outlaying of about £8,000,000.

The Junior Sea Lord.—This member of the Admiralty Board is the supervising Lord of the Transport, Medical and Victualling Services, with the regulation of hospitals and hospital ships. He is also responsible for every detail of the arrangements for coaling the fleet, and thus has a most important work in regard to the efficient employment of the Navy. His duties necessarily bring him into constant personal communication with the First Sea Lord. He has to do with the appointment of chaplains and naval instructors, medical officers (except as otherwise provided), and of paymasters, assistant paymasters, clerks, assistant clerks, and ships' carpenters. The Junior Naval Lord is also in charge of a vast array of work in regard to writers and ships' stewards, assistants, boys, and nursing staff; full and half pay, table moneys, and compensations and allowances to the fleet; uniforms; the debts of officers and men; ships' libraries, prize money and bounties; deserters'

effects, salvage, naval savings banks, and the freight on conveyance of treasure; and also pensions to seamen and marines and widows of naval and marine officers.

The Civil Lord.—In the department of the Civil Lord, who is the supervising Lord of the Works Department, and under special charge of the Director of Works, lies all that concerns Admiralty buildings and works, their construction and repair, including contracts and purchases of building stores and land, and the buildings, sites, and leases of the coastguard stations. The Civil Lord is responsible for the civil staff of the naval establishments, including classification, appointment, promotion, pay, allowances, and pension, except promotions and appointments in London, and of professional officers of the Controller's Department at the Dockyards. The same Lord deals with Greenwich Hospital business, compassionate allowances, the charitable fund, allowances to ministers of religion, Dockyard and Marine Schools, and special questions relating to the retirement, pay, and allowances of naval and marine officers and men.

The Parliamentary and Financial Secretary.—The great and growing magnitude of naval finance, and the necessity for efficient financial control, have added largely to the importance of the Parliamentary and Financial Secretary, who is responsible for the finance of the Department, for the Navy Estimates, and for matters of expenditure generally, and is consulted in regard to all questions involving reference to the Treasury financially. Upon the report of the Select Committee of the House of Commons, 1885, an inter-departmental committee was appointed to inquire into the financial administration of the Admiralty, and reported that the controlling powers of the Parliamentary and Financial Secretary were complete, but that it was desirable "that permanent assistance should be afforded him in the direction of financial criticism and control, by placing the Accountant-General in closer

relationship with him." The Accountant-General, therefore, as assistant to the Financial Secretary, was placed in a position to offer financial criticism of proposed expenditure; but the principle of a financial officer commenting upon outlay which Her Majesty's professional advisers considered essential for the good of the country, was not readily accepted at the Admiralty, and much discussion occurred upon the condition of things that then ensued. It is not, however, necessary here to enter further into the administrative power of the Accountant-General, with whose work I shall deal when I come to describe his special department of work. His position in regard to estimates and expenditure, and as adviser of the Financial Secretary, is of much importance. In addition to its general work in the matter of estimates and expenditure, the department of the Financial Secretary is charged to examine proposals for new and unusual expenditure, and superintends the purchase and sale of ships and of general stores, and the payment of hire of ships accepted as armed cruisers, etc., besides much other financial business. To the Financial Secretary also fall questions connected with the Exchequer and Audit Department.

The Permanent Secretary.—The department of the Permanent Secretary, subdivided into the military, naval, and legal branches, each under a principal clerk, with the civil branch under the Assistant-Secretary, and the record office and the registry and copying branch, has been described as the "nerve centre" of the Admiralty, and, since it embraces the channel through which papers for the Lords of the Admiralty pass, for the intercommunication of departments, and for Board correspondence, that description is not inappropriate. But the work of registry and transmission is the smallest function of the Secretariat. Each branch has highly important duties confided to it, as the next chapter of this volume will show, and the department initiates and conducts a great deal of work inde-

pendently. Generally speaking the work of the branches may be said to embrace matters relating to the commissioning of ships and the distribution of the fleet, the manning and discipline of the Navy, and the appointment, promotion, and pensioning of all persons employed under the Admiralty, both naval and civil. In the work of transmission, too, papers are sent on, as much as possible, with the detail of what is to be done upon them, or reported upon up to a certain point, and are accompanied, where necessary, by references to illustrative precedents. The Permanent Secretary is responsible for the discipline and proper working of the Admiralty departments, and with him rest recommendations for appointments in the office. It is his duty to attend the meetings of the Admiralty Board, and, in a real sense, it may be said of this highly important officer that he is the repository of Admiralty traditions, and of a vast body of information accessible to no other single individual, and that through him and the Assistant-Secretary the central work of the Board is almost wholly carried on. His personal duty is to obtain a practical insight into Admiralty work and administration, to prevent the various Departments from acting independently, and to keep the thread of administration unbroken on the constitution of a new Board.

Tabulation of the Relation of the Lords of the Admiralty to the various Departments.

First Lord.					
First Sea Lord.	Second Sea Lord.	Junior Sea Lord.	Controller.	Civil Lord.	Financial Secretary.
					Accountant-General.
					Director of Contracts (who is also under the superintending Lords of the departments for which purchases are made.
					All departments, as regards financial questions.
				Director of Works.	
				Accountant-General, in regard to special questions affecting pay and allowances of the fleet.	
				Director of Greenwich Hospital.	
			Director of Naval Construction.		
			Director of Dockyards.		
			Engineer-in-Chief, as regards material.		
			Director of Naval Ordnance, as regards material.		
			Director of Stores, except as regards coals for the fleet.		
			Expense Accounts Branch.		
		Director of Transports.			
		Director-General of the Medical Department.			
		Director of Victualling.			
		Director of Stores, as regards coals for the fleet.			
		Accountant-General, in regard to certain allowances, table money, etc.			
		Chaplain of the Fleet, as regards chaplains and naval instructors.			
		Intelligence Department, as regards mobilization matters affecting the above duties.			
	Admiral Superintendent of Naval Reserves, as regards personnel.				
	Engineer-in-Chief, as regards personnel.				
	Chaplain of the Fleet, as regards naval schools.				
	Manning the Navy.				
	Intelligence Department, as regards mobilization of the fleet.				
	Deputy Adjt.-General Royal Marines.				
Admiral Superintendent of Naval Reserves, as regards ships.					
Hydrographer.					
Director of Naval Ordnance, as regards gunnery and torpedo training establishments.					
Naval Intelligence Department.					
Discipline.					
Personnel of the Navy; movement, condition, and organization of the fleet (including coaling); and maritime defence.			Material of the fleet.	Works and civil personnel.	Finance.

The Permanent Secretary superintends all correspondence in the name of the Board, prevents the various departments acting independently, and provides for the execution of orders.

JOHN JERVIS, EARL ST. VINCENT, FIRST LORD OF THE ADMIRALTY, 1801-1804.
(*Beechey.*)

Part II.

THE MACHINERY OF NAVAL ADMINISTRATION.

CHAPTER I.

THE DEPARTMENT OF THE PERMANENT SECRETARY.

The reader has now been informed concerning the character and features of the Admiralty system in general. I have shown the organic growth of the Board of Admiralty, how it has developed under changing conditions to meet new and expanding needs, and yet how, working upon lines laid down through ancient precedent, and sanctioned more by immemorial custom than by explicit instruments, it still, in its operations, exhibits something of the rapid dealing and elastic methods of procedure which would be possible in the business affairs of a single untrammelled individual—of the Lord High Admiral, who once, as representative of the Crown, had direct control over all naval concerns. I have explained how the happy constitution of the Admiralty Board has enabled it to handle a mass of business now grown to vast complexity, without splitting up into over-specialized departments, presided over by independent chiefs with duties and offices sharply and precisely defined. The existing organization and administrative system were then explained, and it has been

seen in what relation the several Lords of the Admiralty stand to the Civil Departments of the Navy which are under their direction, and under the control of the Admiralty Board.

These Civil Departments now claim attention. They are the machinery of naval administration, the organized and executive branches through which the work is carried on. I take first the highly-important Department of the Permanent Secretary, formerly known as the Naval Department, because it is the immediate organ of the Board. Other Civil Departments have duties more readily defined, but none more important. Thus the Director of Naval Construction, the Engineer-in-Chief, the Directors of Naval Ordnance, of Dockyards, and of Stores, and the Inspector of Dockyard Expense Accounts, all tributary to the Controller, are concerned with the material side of the Navy. The Admiral Superintendent of Naval Reserves, the Adjutant-General of Royal Marines, the Director of Victualling, the Medical Director General, and the heads of some subsidiary branches, are occupied with special sections of the personnel, and with particular duties towards the personnel generally. The Accountant-General is devoted wholly to finance, and the Contract and Purchase Department, whose duties are indicated by its title, is closely connected with him. In the same way the Directors of Naval Intelligence, Hydrography, Transports, and Works, have particular duties confided to them by the Board. But the duties of the Permanent Secretary cannot be so clearly defined, and for this reason, that he is the mouthpiece of the Board, and his Department the machinery by which a great deal of its varied work is carried on.

Up till 1869, roughly speaking, the Secretariat, besides carrying out special executive duties which were not dealt with in any other Department, was also the channel by which submissions from the other Departments reached their Lordships, whose decision was conveyed to those

Departments by means of letters written in the Secretariat and signed by the Secretary. Under this arrangement no important decision could be arrived at without the special cognizance of the Secretary and his Department; and the orders of the Board passed through one channel, which thus became the central depository of official knowledge. This, notwithstanding some alterations which have been introduced, the Department of the Permanent Secretary still continues to be.

Changes, however, were introduced in 1869 to modify the system then existing, which, by its nature, caused some duplication of work and consequent delay, and certain of the Departments were authorized to communicate directly with, and all of them to execute directly the orders of the Board or of their Superintending Lords, without the intervention of the Secretariat.

These changes were still further carried into effect in 1879-80, when the "Naval Department" was reconstructed as the "Secretary's Department," on the basis of the report of a committee presided over by Sir Massey Lopes, the intention being to restrict the functions of the Secretariat, so far as the other Departments were concerned, to dealing with the political, disciplinary, personal, and executive aspects of any question which these Departments brought before the Board.

The work of the Department proper may be said generally to embrace matters relating to the commissioning of ships and the distribution of the fleet; to the manning and discipline of the Navy; and to the appointment, promotion, and pensioning of all persons employed under the Admiralty, both naval and civil. This work is conducted under the direct personal orders of the Board, in the Military (or Secret and Political), the Naval, the Legal, and the Civil Branches, each presided over by a Principal Clerk, except the Civil Branch, which is in charge of the Assistant Secretary.

Looking a little more closely into the duties of the branches of the Secretariat, we find that the Military Branch—having its most important duty in time of peace in regard to the commissioning, distribution, and paying off of ships, their complements and questions of leave—takes charge also of political correspondence, the suppression of piracy, and the protection of trade and fisheries, matters of quarantine, scientific exploration, signals and signal books, salutes, and much other like business. This branch is the secret and political office of the Admiralty, and is intrusted with the conduct of confidential affairs, and, in war time, would be generally the directing channel of operations, charged with questions relating to home and colonial defence, blockades, embargoes, prizes, and other matters incidental to hostile operations.

The Naval Branch is largely occupied with the great work of officering and manning the fleet, and is therefore the main channel of the Second Sea Lord's operations. Here all general arrangements and regulations are made for the entry of men and boys, and the work of training ships, and the badges, promotion, and discharge of men. Again, the branch is concerned with all that relates to the education of officers, and to appointments, promotions, leave, retirements, removals, restorations, services, and claims of officers, good service and other pensions, and generally of honours, distinctions, decorations, medals, etc. The establishment and internal economy of the Corps of Royal Marines, and the general arrangements and regulations of the Coastguard and Reserves, are also within the scope of this branch, with other work relating to the personnel.

The duties of the Civil Branch are analogous on the civil side of the Navy. Thus it deals with the appointments, promotions, retirements, pay, allowances, and leave of all salaried persons (including naval officers at the

Admiralty) in Admiralty establishments, and of all persons on day pay, as well as with Civil Service examinations for these classes. The branch is further occupied in matters relating to civil appointments and fees at Greenwich Hospital, and civil superannuations and gratuities. Again, it deals with compensation to officers for wounds and injuries, with naval and Greenwich Hospital pensions, etc., to seamen and marines, with medals for long service, conspicuous gallantry, and meritorious service, with widows' pensions, compassionate allowances to children of naval and marine officers, and much else.

The Legal Branch deals with questions of discipline, courts-martial, courts of inquiry and naval courts, desertions, discharges with disgrace, prisons and prisoners, punishment returns, etc. It also supervises the inspection returns of ships, and deals with matters concerning the slave trade, flags, colours, ensigns, and uniforms; and questions relating to the Queen's Regulations, and the legal aspect of blockades, prizes, etc., fall within its range. The Record Office, in which papers are stored upon an admirable system, is also attached to the Secretariat, in addition to the Registry and Copying Branches.

This brief and imperfect survey of the work conducted in the Department of the Permanent Secretary will show how highly important it is, not only in regard to the conduct of general business, but especially in relation to the personnel of the Navy, and the regulation and employment of the fleet. The "Naval Department" was reorganized, as I have said, in accordance with the recommendation of Sir Massey Lopes' committee in 1879, and a higher rate of pay was sanctioned, "not simply because the Secretary's Department has confidential work to perform, for this might be said, though in different degrees, of almost every public office, but because we also contemplate its performing serious and difficult administrative duty." In addition to work of this character, which may be de-

scribed as deliberative and consultative, it has been seen that the Secretariat, including a Registry, has duties of a mechanical kind; but the registration of papers is the smallest and least considerable part of the Department's work. It is, however, the channel of intercommunication between Departments, and vast numbers of papers pass in the course of the year through the Secretary's hands, being marked by him for the Lord or the Department to which they should go. Moreover, in submitting papers to the several Lords, the branches indicate the detail of what is to be done upon them, or report upon them with reference to precedents where needful; and the Record Office of the Department has an excellent system for reference to all necessary papers.

The branches of the Department are directly administered by the Permanent Secretary, whose personal duty also consists in obtaining a practical insight into all Admiralty work, to whatever Department belonging; in having a general hold of the Admiralty administration; in signing all letters in the name of the Board, from whatever Department emanating; in seeing that the various Departments do not act independently of each other; and in keeping the thread of administration unbroken on the constitution of a new Board.

The Permanent Secretary is therefore the repository of a vast mass of information accessible to no other single individual, and by him, in a real sense, the traditions of the Admiralty are preserved unbroken through unceasing change.

THE NAVY OFFICE, CRUTCHED FRIARS, 1750.
(*Cole.*)

CHAPTER II.

THE CONTROLLER'S DEPARTMENT.—THE DIRECTOR OF NAVAL CONSTRUCTION AND THE ENGINEER-IN-CHIEF.

I ENDEAVOURED, in the first part of this volume, to indicate in a general manner the nature of the duties of the Controller of the Navy as a supervising Naval Lord. These duties, in relation to the machinery by which they are executed, now claim closer attention. The business of building up and maintaining in efficiency, abreast of the latest scientific developments and of the greatest triumphs of mechanical skill, the material side of the Navy, is vast, complex, and surpassingly important. It is a business that has increased by leaps and bounds with the expansion of the fleet, the progress of shipbuilding, and the increase of Admiralty establishments; and it has brought into new prominence the array of Departments and branches over which the Third Naval Lord and Controller presides.

As I have explained, the Controller became only within recent years a member of the Admiralty Board. He took his seat in 1882, under the Order in Council of March 10th of that year, when his duties were merged with those of the Third Naval Lord, but he had previously, from 1869 to 1872, been temporarily a member of the Board, and, in the interim, had possessed the right of attending the Board, and explaining his views, whenever the First Lord submitted for opinion designs for ships or any other matters emanating from the Controller's Department. The anomaly, already described, which led to the inclusion of the Controller in the Admiralty Board lay in the fact that —as one of the five Principal Officers who transacted the business which, before Sir James Graham's reforms, had fallen to the Navy and Victualling Boards—he was supervised by the First Naval Lord, the officer responsible for the efficiency of the fleet, and therefore interested in increased expenditure, and yet, at the same time, the only officer in a position to enforce economy. The business of the Controller, moreover, had vastly grown. Representing the old Surveyor of the Navy rather than the Comptroller of the Duke of York's instructions,[1] he had received the title of "Controller" in lieu of "Surveyor," under Order in Council of January 23rd, 1860, when enlarged powers in regard to the management of the dockyards were added to his office; and this great increase in his duties made his inclusion in the Board highly advantageous for the public service.

It is unnecessary at this point to repeat what I said in describing generally the Controller's duties.[2] By the Order in Council of March 19th, 1872, he was made responsible to the First Lord for so much of the business of the Admiralty as related to the material of the Navy. Let me say here, however, incidentally, that, in dealing

1 "The Œconomy of His Majesty's Navy Office," 1717.

2 Part I., chap. iv.

with the administration of naval business, hard and fast rules are difficult or impossible to draw, and can rarely be drawn with advantage. The affairs transacted by the Controller of the Navy, or under his responsibility, might be described under many heads, but they fall reasonably under five principal ones. His first duty, naturally, is in regard to the design and construction of ships and machinery, upon which he advises the Board, the practical work resting with the Director of Naval Construction and the Engineer-in-Chief. This is the branch of the Controller's Department which I propose to describe in the present chapter. His second duty is in regard to the armament of ships of war, and here he is assisted by the Director of Naval Ordnance. Further, the Controller is charged, not only to initiate proposals in regard to work, but also to see to the practical execution of it, and to carry out the orders of the Board that concern his Department; and hence the third branch of his duty is that of dockyard administration, with responsibility for the work done at the dockyards. Here he is assisted by the Director of Dockyards, whose office, replacing that of the Surveyor of Dockyards, was created, with larger powers, in January, 1886. The work of shipbuilding, and the local administration of the yards and other establishments, form, however, a subject that lies beyond the scope of this volume. The fourth branch of the Controller's work—as I classify the branches for convenience—is the superintendence of the Stores Department, which has at its head the Director of Stores; and, lastly, he has the supervision of the Dockyard Expense Accounts, which are under the Inspector of those accounts. It will, of course, be understood, in regard to each of these branches of work, that the Controller is supreme, and can overrule officers under him. From this brief general survey of the machinery at the disposal of the Controller for the administration of his Department, it will be seen that his energies, and those of his departmental officers, like the

labour of the huge army of artisans in our dockyards and other naval establishments, are all bent to the building and maintenance of the material elements of the fleet.

It being well understood that the place of the Controller in the Admiralty, as a working administrative machine, will be dealt with in the last part of the present volume, and the ground being cleared somewhat by an enumeration of the branches of the Controller's Department, I feel free now to turn to a consideration in some detail of the manner in which the work of warship designing and warship construction are carried on under his supervision—to the duties of the Director of Naval Construction and of the Engineer-in-Chief.

The Director of Naval Construction—upon whom devolve the constructive duties formerly executed under the old system by the Surveyor (or Controller) of the Navy as one of the principal officers—is also Assistant-Controller, having received that title in December, 1885; and, as Assistant-Controller, he acts in the absence of his chief in relation to all matters save ordnance and torpedo material. His opinion is expressed through the Controller upon the shipbuilding programme in regard to constructive possibilities. He is also, as Director of Naval Construction, chief of the Royal Corps of Naval Constructors, of which I shall have something to say presently. His duties have been officially laid down as involving responsibility to the Controller for all matters touching the design and construction of the hulls of ships and boats, including masting, torpedo and electric light apparatus, and all nautical apparatus, whether building in the dockyards or by contract. The Director of Naval Ordnance consults with him upon matters connected with gun and torpedo mountings before they are sent to the Controller, and drawings and specifications in this regard are signed by both officers. The Director of Construction is further responsible for the surveying of merchant ships, as to their suitability for

engagement as armed cruisers, and for keeping a list thereof. He is also directed to visit and survey the various ships in progress at the dockyards, and contract-built ships in private yards, as may be necessary, in order to see that the designs are being carried out in all their details to his satisfaction.

This outline of duties can give but an imperfect idea of the mass of complex business that passes through the hands of the Director of Naval Construction in his work of ship designing. In the last part of the present volume I propose to deal with the framing of shipbuilding programmes, and with the selection of types and classes of vessels, these being matters which rest with the Admiralty Board. They are questions necessarily left largely to the decision of the naval members of the Board, and it is only when a conclusion as to naval requirements of armament, desirable speed, coal endurance, protection, complement, and so forth, has been arrived at, that instructions regarding designs for ships come through the Controller to the Director of Naval Construction. I shall not dwell upon the supremely important character of the work of warship building, a work demanding in the designer the most complete knowledge of naval architecture, and of the scientific means and practical resources within the reach of engineering skill. This importance is sufficiently obvious. It is the duty of the Director of Construction to take advantage of every new light that is thrown upon the stability and fighting efficiency of warships. All reports received from ships in commission are studied from the designer's point of view, to gain experience and knowledge for the improvement of future designs; and the character of foreign ships, and all advances in naval architecture and engineering made abroad, are diligently investigated and recorded with the same purpose, and independently of the work of the Naval Intelligence Department. Moreover, a new and practical

character has been given to the work of the Director of Naval Construction. Thirty years ago there were clever men at the Admiralty who had been designing ships for half a lifetime, and who yet had never had to do with the building of ships; and there were practical shipbuilders at the yards who knew nothing of designing. Now all this is changed. The operations of design and construction are carried on hand in hand, and the Admiralty designers are in close touch with the work going forward in the dockyards.

This change has been brought about largely through the creation of the *Royal Corps of Naval Constructors*, which has the Director of Naval Construction at its head. The corps was instituted in 1883, chiefly through the advocacy of Admiral Sir Houston Stewart, who had been for ten years Controller, and possessed a vast knowledge of dockyard work. At that time young men could only enter the Admiralty service on the shipbuilding side as workmen, and there was little inducement for those of superior or scientific education to join. It was desired also to open a career to the students trained by the Admiralty at the School of Naval Architecture, and thus to retain them for the public service, which some of them paid a fine of £250 to forsake. At the same time no bar was placed to the advancement of the workman class, from which many able constructors come. A student of naval construction under the new system begins his training by spending five years in the dockyards, learning the practical work of shipbuilding and engineering by going through all the shops, after which he passes to the Naval College at Greenwich for three years, where he is trained for nine months of the year as a naval constructor, spending the rest of the time at the dockyard. He is then, upon examination, admitted an assistant-constructor of the lowest grade, and a member of the establishment of the Corps, and is subsequently promoted by selection. I have

dealt so far with the training of naval constructors, which involves interchangeability of designing at the Admiralty with technical experience at the dockyards, in order to show the character of the personnel in the constructive branch of the Controller's Department.

The Director of Naval Construction is responsible, not only for the design of ships, but for their construction. He is responsible for bringing together in one ship, so far as is possible, all the qualities intended by the Board, subject to data given to him by the Engineer-in-Chief and the Director of Naval Ordnance, and upon him chiefly devolve the guarantees of speed, coal endurance, draught, stability, structural strength, sea-going qualities, accommodation, and equipment. He is responsible for construction in this sense, that he approves a vast number of working drawings of structural parts prepared at the dockyards. In laying down plans for a warship, the Director of Naval Construction works in conference with the Director of Naval Ordnance, the Assistant-Director of Torpedoes, and the Engineer-in-Chief. A sketch design embodying the requirements is first made, which the Controller submits to the Board; and this, upon approval, is worked out in detail, or modified with a view to ultimate adoption. The Controller next sends the design, with a full and complete description of the expected qualities and capabilities of the ship, to the Secretary, who circulates it among the several members of the Board, prior to its consideration at a Board meeting. After a design has once been approved and received the Board stamp, no alteration or addition either in hull, machinery, armament, complement, boats, stores, or other details is permitted, without the concurrence of the Board.

The drawings, when prepared, with specifications and a bill of quantities, are sent to the dockyard, and, the ship having been "laid off" to her full size, upon a kind of huge drawing-board known as the "mould-loft," the

making of working drawings begins. These drawings, where they concern the armament or fighting quality of the ship, before being sent up to the Admiralty are examined, for approval or comment, by the gunnery and reserve officers of the port, and at the Admiralty are considered, amended and approved by the Director of Naval Ordnance, the Controller, and, it may be, the First Naval Lord. Meanwhile, the question of an estimate of cost has been considered, a provisional estimate presented by the Director of Naval Construction in conjunction with the Engineer-in-Chief being replaced by a detailed estimate prepared by the officers of the yard, whose work in this matter is facilitated by the improved system which has been introduced in regard to the Dockyard Expense Accounts. At the same time, at the Admiralty, steps have been taken to arrange contracts for all the materials of the ship, a work which is undertaken by the Director of Navy Contracts.

It thus appears that the Director of Naval Construction is at the head of a very powerful organization for work, and that he is in constant communication with all the other heads of branches in the Controller's Department. At the dockyards the actual work and organization are, as I shall subsequently show, under the Director of Dockyards, but the practical progress is constantly watched by the Director of Construction or his assistants, and the frequent presence of officers knowing the designs intimately is found to facilitate the economical and efficient arrangement of work in a high degree.

The system in regard to ships built by contract, the conditions of which will suggest themselves to the reader, is similar, but presents points of difference. The Director of Naval Construction is responsible to the Controller for the whole of the contract work, and expresses his opinion as to the firms who should be invited to tender, for which purpose his officers inspect the works and plant of manu-

facturers, as well as upon the tenders when sent in. The designs prepared at the Admiralty and sanctioned by the Board are sent to the contractor, as plans are to the dockyards, but no bill of quantities accompanies them, and the Director of Construction supervises the working drawings as in the case of dockyard-built ships. But the main difference in regard to ships built in private yards, so far as the Admiralty is concerned, lies in the fact that before the work is begun there is a clear understanding with the contractors as to the cost of the vessel. Resident overseers, who are officers of the Director of Naval Construction, supervise the workmanship and building operations, and see to the fulfilment of the intentions of the designer; and there are resident overseers also at the works in which armour is made, where steel is manufactured, and where chain cables are produced. Stringent supervision of this kind is not necessary at the dockyards, where the officers are familiar with Admiralty practice, and supervise the workmanship through the foremen of the ships being built. It is sometimes found advantageous to send as many as three or four overseers to private yards to assist the constructors in getting out working drawings in accordance with Admiralty practice, a duty additional to that of inspecting works and materials.

When a ship built by contract is received, it is the duty of the Director of Naval Construction to see, through the dockyard officers, that the conditions of the contract have been fulfilled. The vessel will be docked for outside inspection of her hull, and perhaps for coppering. There are steam trials to undergo, guns to hoist in, and sometimes confidential details of torpedo or other armament to add, with various adjustments. The stores also are to be put on board, and this always involves work upon the ship. When all is done, both in the case of dockyard and contract-built vessels, the Director of Naval Construction advises the Controller as to the completion of them accord-

ing to design, and their seaworthiness; and before any new ship goes to sea a "statement of stability" is inserted in a book which is placed in her captain's hands. He thus leaves port well informed as to the sea-keeping qualities of his vessel, and with any special recommendations that her constructors deem it well to give in regard to the handling of her. The present eminent Director of Naval Construction has stated that the captains of Her Majesty's ships do, in fact, go to sea with a wealth of information concerning the qualities of their ships which is not paralleled anywhere.

In regard to alterations in ships during service, or refits, it is an order of the Board that none shall be introduced without the sanction of the Director of Naval Construction, which practically involves the submission to that officer of every estimate for a refit of any importance. But, apart from the question of repairs, which are in the nature of up-keep, additions and alterations are often made upon the suggestion of officers in command, or owing to progress in construction or in service matters, such as better armament, magazine construction, improved protection, the ventilation of coal bunkers, modern engines and boilers, and the introduction of electricity for lighting or other purposes; and here again there is a wide field for the work of the Director of Naval Construction. Upon this matter, and upon the question of ultimate responsibility for seaworthiness after repairs and alterations have been made upon economical considerations, much might be written. It has happened at least once that the captain of a ship refitted and altered has differed from the officers of the Constructive Branch as to the seaworthiness of his vessel. In the particular case referred to, the Controller and First Naval Lord, taking the statement of stability and other circumstances into consideration, dismissed his plea, and ordered the vessel to sea.

It remains to be said that the Director of Naval Con-

struction has to do with salaries and wages as head of the constructive corps, that, in conjunction with the Director of Stores and the Director of Dockyards, he advises the Controller in regard to materials for shipbuilding and repairing, that he is responsible, with the Engineer-in-Chief, for the survey and valuation of any vessels purchased for the Navy, and, with the Director of Naval Ordnance, in the matter of gun mounting, etc., and, lastly, that he surveys vessels secured as reserve merchant cruisers, assesses their qualities, and supervises the arrangements made for the installation of armament.

From this survey of the very important duties of the Director of Naval Construction, it appears that the relationship of that officer to the *Engineer-in-Chief* is close and constant. This, from the universal employment of steam machinery in modern men-of-war, is necessarily so. The Engineer-in-Chief, however, is not a subordinate of the Director of Naval Construction. He is an independent officer, responsible directly to the Controller for all matters concerning the design and construction of steam machinery in ships and boats, and is jointly responsible with the Director of Naval Construction and Assistant Controller and with the Director of Naval Ordnance for the design and manufacture of gun mountings, and for the mechanical arrangements connected with the supply and fitting of torpedo apparatus, and the electric lighting of ships and boats. By his instructions he is to give such professional assistance as may be requested by the Director of Dockyards relating to the extension, improvement, and maintenance of the machinery in dockyards and factories, as well as to the repairing and alteration of machinery in ships and boats. He also submits to the Second Naval Lord questions relating to the engineer training establishments, and advises on matters concerning the engineers of the Royal Navy, submitting to the same Lord the appointment of all engineer officers.

The manner in which the Engineer-in-Chief is called upon to collaborate with the Director of Naval Construction in the preparation of plans for warships has already been explained. His procedure in regard to engines resembles that taken in the matter of contract-built ships. The general design is prepared by him at the Admiralty, with complete specifications; and tenders from selected firms are sought, the lowest being usually accepted, save when the plans submitted are deemed unsatisfactory. A tender being accepted, detailed designs are prepared by the builders, which are examined in the office of the Engineer-in-Chief on behalf of the Admiralty; and, during the progress of construction, the machinery is inspected from time to time, and, in some instances, resident engineers are sent to works. It usually happens, in the case of ships built by contract, that the engines are supplied by the builders. The trials of all new machinery fall under the Engineer-in-Chief, and he follows that machinery through its existence so long as the ship remains in commission, in the sense that engineers of the Navy are under him, and he advises upon the appointment of engineers to the fleet. Theoretically, however, I believe he has no concern with machinery fitted on board, though he would be responsible for a breakdown due to want of strength. When machinery calls for repair, it passes beyond his purview, the work being carried out under the Director of Dockyards, who, for this purpose, has a distinct engineering personnel, by whom the machinery is afterwards inspected. I may here observe that this is an arrangement which has met with adverse criticism. If a ship in commission should require new machinery, the Director of Dockyards and the Engineer-in-Chief would jointly report upon the facts, but these would come before the latter upon a question of management, to ascertain if defects had arisen through mishandling. At the same time, the Director of Dockyards is empowered to call upon the Engineer-in-Chief

for professional assistance and advice, and periodical reports upon machinery from the engineers of ships are passed from the former to the latter. As I said above, outside the Controller's department, the Engineer-in-Chief has a responsibility to the Second Naval Lord for advice concerning the engineer training establishments and the appointment of engineer officers to the fleet. I may add that the training of engineer students is carried on at the Royal Naval Engineers' College, Keyham, where they spend five years, having practical work in the yard at Devonport, and at the Royal Naval College, Greenwich, followed by further dockyard experience.

CHAPTER III.

THE CONTROLLER'S DEPARTMENT, CONTINUED.—THE PROVISION OF NAVAL ARMAMENTS.—THE DIRECTOR OF NAVAL ORDNANCE, AND THE ASSISTANT-DIRECTOR OF TORPEDOES.

The Director of Naval Ordnance, advised and assisted on all torpedo matters by the Assistant-Director of Torpedoes, stands to the Controller in the same light as the Director of Naval Construction and the Engineer-in-Chief; that is to say, he is the head of an independent branch, and is directly responsible to his chief. Yet in all departments of Admiralty work, as the reader will have seen, the duties of branches are so closely inter-related, that no real separation exists, and this is especially true in regard to the Ordnance. A ship being a fighting engine, her guns and torpedoes are a primary consideration with her constructors, and hence in all matters of the design and construction of warships, the Director of Naval Ordnance acts in close consultation with the Director of Naval Construction. So intimate and sustained is the relation of the Ordnance Department to the fleet, that scarcely a case can arise of any considerable repairs to ships in which the Director of that Department is not concerned, either in regard to guns, gun-mountings, magazines, torpedo apparatus, electrical fittings, or other fighting gear. Not only, therefore, in regard to new ships, but to those which call for repair, it is his duty to advise as to their being brought up to a proper standard of gunnery efficiency, and hence

estimates for large repairs and the refitting of vessels are invariably sent to him for the expression of his opinion.

Yet it is curious to reflect—though the Master of the Ordnance was an officer of high consideration in former times, an Ordnance Department having been in full operation as far back as the days of Henry VIII., and the Board of Ordnance a department common both to the sea and land services, but instituted for the Navy—that the Navy afterwards fell, in this matter, into dependence upon the military, through the work connected with naval gunnery devolving in the last century upon the Master-General of the Ordnance, and the duties of the Board of Ordnance being vested, in 1855, in the Secretary of State for War. Upon this subject a great deal has been said in Parliament and the press. The evil system remained in force until recent times, but has been progressively modified by the appointment, as a responsible officer of the Controller's Department at the Admiralty, of the Director of Naval Ordnance in lieu of the naval officer who formerly advised the Director of Artillery at the War Office; by the gunnery charges being transferred from the Army to the Navy Estimates; and by the institution of the Naval Ordnance Store Department, over which the Director of Naval Ordnance presides, directing a Storekeeper-General, with civil assistants, and ordnance officers at the ports and other establishments.

The question of transferring the responsibility for naval armaments from the War Office to the Admiralty, long debated, rose to new prominence in 1868, in relation to the guns for the *Hercules*, in the provision of which there had been much delay. At that time naval gunnery requirements were provided for in the Army Votes, and in November of each year it was the custom for the Admiralty to furnish to the War Department a list of ships intended to be commissioned in the ensuing financial year (and in three subsequent months) with the detail of their armaments and

complements, as well as particulars of the guns which should be completed, or partly completed, to meet the wants of ships, and of the necessary reserve of guns to replace those which became unserviceable. The result was unsatisfactory. In addition to the practice, scarcely sanctioned by the constitution, of charging naval outlay upon army estimates, and yet leaving the administrative direction of the vote in Admiralty hands, the Admiralty itself found grave practical disadvantages, and even danger, in the system. The following tabular statement of naval gunnery votes between 1881-82 and 1886-87, compared with the amounts asked for by the Admiralty, will show how disastrously the arrangement affected the public service upon the ground of naval efficiency. Nothing, said the Director of Artillery in 1884, could be more unsatisfactory than the mannner in which the naval gun estimates were put forward year after year to be criticised, manipulated, and reduced by the War Office.

	Asked for.	Granted.
1881-82	£647,759	£360,000
1882-83	877,001	616,033
1883-84	707,002	500,491
1884-85	899,602	500,000
1885-86	1,145,000	850,000
1886-87	1,516,887	1,000,000

At the same time the Admiralty was left in ignorance as to the number of rounds in store for the various types of guns in the service, except of those in reserve at the foreign depôts, and the same was the case in regard to fuses, tubes, etc. Neither was there any means of discovering whether the stock of naval material increased or diminished from year to year. Again, no account was given to the Ad-

miralty of the amount actually expended yearly by the War Office on naval guns or other material, nor was there any exact account of the yearly production. No distinction between naval expenditure and army expenditure was made, and the classification presented was admitted on assumption. Although the general system found some defenders among military officers, it was condemned by the naval service, and most of the high officials at the War Office utterly disapproved of it. Lord Cardwell, Sir Henry Storks, Sir G. Balfour, Sir H. Gordon, Sir H. Lefroy, Sir John Adye, Sir F. Campbell, and many more advocated a change, and their views were shared by several Secretaries of State, notably by Mr. Childers, Lord Hartington, and Mr. W. H. Smith.

The question of the transfer had been considered by the Royal Commission of 1837 and the Select Committee of 1849, and after 1868 a long correspondence took place between the Admiralty, the War Office, and the Treasury, which it would be tedious to recapitulate.[1] On one hand it was urged that both economy and efficiency would result from the change, that divided responsibility must lead to delay, confusion, and danger, that the War Office could not check Admiralty demands, and that the Admiralty, not being directly responsible to Parliament, had no sufficient motive for economy. On the other hand it was argued that a really divided control did not exist, that the relation between the Departments was the same which subsisted between the Admiralty and the Board of Ordnance from early times, that the increase of officials and stores would lead to unnecessary outlay, and that the Admiralty would be looked upon as responsible without having power to control the manufacturing departments which it would be obliged to employ. In order to bring the matter to a

[1] In the report of these inquiries, and in the Appendix to the Fifth Report of the Select Committee on Army and Navy Estimates, 1887, much information upon the subject will be found.

settlement, an Inter-Departmental Committee was proposed, and on June 22nd, 1886, representatives of the Admiralty and the War Office met to discuss what the scope of the Committee's inquiry should be. It was afterwards reported to the Treasury that both Departments were strongly of opinion that the divided responsibility should end, that, upon the Navy Estimates, the Admiralty should be alone responsible for procuring the armaments, as well as the other warlike stores required for the use of the Navy, and, further, that the question of the making of naval guns at Woolwich should be settled each year by the two Departments as the necessities of the service might require, and as was already done in regard to gun-mountings, but that neither Department had any intention of creating a second Woolwich purely for naval use. The matter was further considered by the Royal Commission on Warlike Stores, 1887, and the Committee on the Organization of the Army Manufacturing Departments, 1887.

The somewhat divergent recommendations of these Committees were not adopted in the form in which they were made. The Ordnance factories were placed under a single head, the Director-General responsible to the military Financial Secretary, instead of being given over to an independent Ordnance Department, and Vote 12 (Ordnance and Warlike Stores) of the Army Estimates was so changed that afterwards the whole cost of naval ordnance and warlike stores was borne upon the Navy Estimates. At the same time the military authorities retained the inspection of warlike stores supplied to the Navy either from the manufacturing departments of the Government or from contractors, and the contracts for such stores were entered into as formerly by the Director of Contracts at the War Office. Save, therefore, for guns obtained by contract, the Director-General of Ordnance Factories is responsible, in regard to the practical work of

supply from the Government factories, for both naval and military guns, while the Director of Artillery at the War Office is instructed to "control the Ordnance Committee," a body composed of naval and military officers and civilians, which is held directly responsible, save in special cases, for the design of all guns for Her Majesty's services. This last arrangement presents some peculiarities, and its tendency seems to be to render real responsibility in the matter indefinite. "The Admiralty," said Sir Frederick Richards, in his memorandum attached to the Further Report of the Hartington Commission on the Internal Administration of the War Office, "object to their officers, who are members of the Committee, being responsible for designs, so that the question as to the responsibility for designs of ordnance is decidedly complicated."

The result of the dispositions thus taken was to make the business of the provision of naval guns in the nature of purchase and supply as between the naval and military departments. Full satisfaction has not resulted from the changes. Thus Sir Frederick Richards, in the memorandum referred to, said that a careful study of the evidence before the Commission, oral and documentary, had convinced him that the system of the Ordnance Department was already condemned, being altogether unsuited to the magnitude, variety, and vast importance of the duties to be administered. He advocated a step which had been forcibly urged by the Admiralty upon the Treasury in May, 1887. "Enough, and more than enough, is to be found to show, not only that the Ordnance Department is in its constitution defective, but that it is altogether too big a business to be worked as a weak division of the War Office administration, and that there is no remedy applicable to the case short of the re-establishment of the Ordnance as an independent Department of State on a scale commensurate with its importance, and under a separate roof." Since these words were spoken the Naval Ordnance De-

partment has been established (1891) at the Admiralty, charged with the business and custody of ordnance stores and the duty of maintaining munitions of war for the Navy at all naval stations.

Such is the recent history of the supply of guns to the Navy. It will be seen that, in the discretion of the Admiralty, they are procured either from the Government factories, which are directed by an official of the War Office, or by contract from private firms. In practice, large numbers of guns are obtained from both sources. The Controller of the Navy is responsible that her Majesty's ships shall be well constructed as fighting engines, duly supplied with guns, carriages, slides, gunnery stores, small arms, accoutrements, etc., and fitted with proper magazines, shell-rooms, turrets, mountings, and other gear, as well as with torpedoes, torpedo stores, and fittings. Further, in the gunnery branch, he has supervision of gunnery and torpedo drill and practice, submarine defences, the gunnery work of coast batteries, etc. I have shown how, as the Controller's responsible officer, the Director of Naval Ordnance collaborates with the Director of Naval Construction and the Engineer-in-Chief, in the design of warships. It is his principal duty to advise the Controller on all questions concerning the ordnance and torpedo material of the Navy, relating either directly or indirectly to the design, construction, repairing, or fitting of ships, their guns, gun-mounts, torpedoes, and carriages, and the electric fittings connected with armament, as well as concerning magazines and shell-rooms, and every arrangement necessary for the proper and efficient working and maintenance of the armament. As advances are made in gun-construction, or otherwise, it is his duty to advise the Controller as to such changes in the armament of ships as he deems advisable. Upon all questions concerned with the mounting of guns and torpedoes he consults with the Director of Naval Construction, and

drawings and specifications of these are signed by both officers. In relation to the practical work of gun-construction, and of warlike material supplied by the War Department, the Director of Naval Ordnance is in personal communication with the Director of Artillery at the War Office, and he communicates directly with the captains of the gunnery ships and torpedo schools on ordnance and torpedo subjects. Another duty is to prepare and submit for approval the estimates for the material of his Department during the ensuing financial year.

I have made allusion above to the *Assistant-Director of Torpedoes*. This officer is the assistant of the Director of Naval Ordnance, to advise upon all torpedo matters. The appointment is a comparatively recent one, made necessary by the introduction of a new arm into the fleet. Whatever concerns torpedo armament falls within the purview of the Assistant-Director, and it is his especial care to watch diligently the developments of torpedo warfare, and to keep himself informed of all inventions that concern his work, into the merits of which he must diligently inquire. Practically, he sees that all ships are provided with torpedoes, torpedo carriages, fittings, search-light apparatus, and the necessary torpedo stores approved, as well as to the provision and readiness for service of the proper reserve stores at torpedo depôts, so that there may be no depletion; and he advises the Director of Naval Ordnance as to experimental and instructional work in the torpedo school ships. He watches the progress of expenditure in his branch of armament, superintends the carrying out of work, and visits torpedo depôts and factories, so as to gain personal acquaintance with it, or to witness trials and experiments with torpedo material. He is thus in a position, according to his instructions, to advise in regard to the design of ships and boats touching torpedo armament and electrical fittings, and the equipping of torpedo boats and destroyers with all requirements for their special services.

In addition to these and other associated duties, the Assistant-Director is prepared when called upon to submit plans for torpedo-boat exercises and manœuvres, suggesting the special points that need to be worked out, as well also as for submarine mining practice; and he is the channel through which much information concerning torpedo questions reaches the Intelligence Department. The Assistant-Director of Torpedoes is instructed in general to consult personally with the Directors of branches of the Controller's Department, but the Director of Naval Ordnance remains primarily responsible for the whole work of the gunnery branch.

In concluding this account of the Ordnance work under the Controller, it remains to be said that the Director of Naval Ordnance is responsible also to the First Sea Lord to advise upon all questions concerning the gunnery and torpedo training establishments of the Navy.

THE RIGHT HON. SIR JAMES GRAHAM, BART., FIRST LORD OF THE ADMIRALTY, 1830-34, 1853-55.

(*From a Drawing by E. Desmaisons.*)

CHAPTER IV.

THE CONTROLLER'S DEPARTMENT, CONCLUDED.—THE DIRECTOR OF DOCKYARDS, THE DIRECTOR OF STORES, AND THE INSPECTOR OF DOCKYARD EXPENSE ACCOUNTS.

THE work which is prepared for and supervised in the manner I have described, is practically carried out in the dockyards and establishments under the superintendence of the *Director of Dockyards*, an officer who, like his colleagues in the Department, has been made directly responsible to the Controller. The Director of Dockyards is that officer upon whom devolves the Controller's responsibility for the general management of the dockyards at home and the naval yards abroad, and for the economical performance of work therein; that is, for the building of ships and boats of all classes, the proper maintenance and repairing of ships and their machinery, and the keeping of vessels up to the approved standard. He is charged also with the duty of introducing and using machinery and appliances in the yards and factories, as well as in the victualling yards. Another important duty of the Director of this Department is to prepare for approval the annual programmes of work in the dockyards at home and the naval yards abroad, for use in framing Vote 8, Section 1, of the Navy Estimates, and to determine the work to be done in the dockyards, as well as to regulate the number, appropriation, and pay of the men, and the supply of necessary materials through the Director of Stores, in accordance with the shipbuilding

programme approved. Further, he assists the Controller in the preparation of the estimates for plant and machinery required for the naval establishments (included in Vote 8, Sections 2 and 3), and submits proposals relative to necessary works to be carried out in the yards by the Department of the Director of Works. But his responsibility does not end here. The Director is instructed, as work goes forward, to exercise control over expenditure at the dockyards of the money voted, for which an excellent system of expense accounts exists, as well as at the foreign yards —Gibraltar, Malta, Bermuda, Hong Kong, the Cape of Good Hope, Jamaica, Halifax, Trincomalee, Esquimalt, Sydney, and elsewhere.

The creation of the office of Director of Dockyards was sanctioned in December, 1885, in lieu of that of Surveyor of Dockyards, and at about the same time the Inspector of Dockyard Expense Accounts was appointed. The whole system of dockyard management had been inquired into earlier in that year, and the Committee had come to the conclusion that the then existing control was insufficient and gave rise to abuses. First appointed in 1872, the Surveyor of Dockyards had been understood to be an officer vested with due means of control, as well as a channel of personal inter-communication between the Admiralty, through the Controller, and the superintendents and yard officers at the out-ports; but he had become so much engrossed in occupations at the Admiralty, that the dockyards were almost deprived of his services, and much mismanagement resulted, owing, largely, to want of continuous and formal inspection. Accordingly, the new Director was instructed to visit the dockyards frequently, "for the purpose of conferring personally with the superintendents and officers in regard to the ships and works in progress." The Surveyor of Dockyards had been subordinate to the Director of Naval Construction, who was responsible for both design and construction, but had also been

officially vested with such discretion and freedom of action as to give him personal responsibility for dockyard work. In instituting the new office, an attempt was made to maintain the same distribution of direction and responsibility. The appointment was of "a Director or Inspector of Dockyards, who, subject to the Director of Naval Construction, will exercise a general supervision over the work at the yards," with its due, timely, and economical execution. The indeterminate nature of the responsibility thus devolving upon the Director of Dockyards led to a minute being prepared on March 8th, 1886, during Lord Ripon's tenure of office, which remained in abeyance until the following May, wherein it was laid down that "if such a system as this is to be effectually established, it will be necessary to separate distinctly the functions and duties of the designing and building branches." "They should be co-ordinate branches acting as a check upon one another under the supreme control of the Controller." The instructions issued on May 28th, 1886, gave effect to this view, the Director of Dockyards, no longer subordinate to the Director of Naval Construction, being made responsible to the Controller of the Navy for the building of ships, boats, etc., in dockyards, and for the maintenance and repair of ships and boats, and of all steam machinery in ships, boats, dockyards, and factories. His personal responsibility was thus defined, as that of the Surveyor's had been. "He will be left such discretion and freedom as will make him personally responsible if the work at the dockyards be not properly and economically executed." In the last chapter but one I endeavoured to show how the responsibility of the Director of Naval Construction for his constructive work is construed. It will be seen that the operations of the Director of Dockyards and his staff upon the constructive side of naval administration, involving, as they do, the employment and supervision of an army of artisans and labourers, are of the greatest im-

portance. The whole subject of dockyard administration, and of the functions of the Admiral-Superintendents and civil and other officers, calls, however, for special treatment, and lies, besides, outside the scope of this volume, which is devoted to the central work and machinery of naval administration.

I shall, therefore, going no further into the question of shipbuilding, proceed to deal with the Store Department, without which—to cite but one of its functions—shipbuilding, repairing, and fitting would be impossible, and with the duties and work of the *Director of Stores*. When Sir James Graham suppressed the Navy Board in 1832, the Storekeeper-General was one of the five Principal Officers who took up its duties. He was charged, under the supervision of a member of the Board, with the maintenance of stock at the naval depôts, acting, in regard to shipbuilding materials, in conjunction with the Surveyor of the Navy, and it was his duty to arrange for the purchase of goods to replenish stock, and for the examination of store accounts. With the reorganization of 1868-69, the Storekeeper-General was abolished, and his purchasing powers, with those of the Comptroller of Victualling, were transferred to the then newly-created Contract and Purchase Department, while the storekeeping duties were given in charge to the Controller of the Navy, under whom they were administered by the Superintendent of Stores. A Committee, appointed a few years later by the Board of Admiralty to inquire into the system under which the duties of the Store Department of the Navy were conducted, expressed the opinion, in its Report presented to Parliament in 1877, that the Department was best subordinated, as under the new system, to the Controller, but that the position of its Superintendent should be strengthened in proportion to the magnitude of his duties. Accordingly, in pursuance of the recommendation of the Committee, the title of the Superintendent of

Stores was changed to that of Director, his salary was raised from £800 to £1,000, and he was recognized as holding a position like that of the Director of Naval Construction and the Director of Naval Ordnance. The report of the Committee brought about a complete and important change in the storekeeping arrangements, both at the Admiralty and the dockyards—but the details concerning these last lie outside my scope—and the business and personnel under charge of the Director of Stores are now organized precisely on the lines then laid down.

Turning now to the question of finance, the effect of the changes of 1868-69 had been to vest the examination of Naval Store Accounts in the Accountant-General. The arrangement was in many ways unsatisfactory, but I shall defer a statement of the objections to it until a later chapter. The whole subject has been inquired into by several commissions and committees, and it will suffice here to say that, in 1886, the Admiralty transferred the examination of these accounts to the departmental officers, one of whom is the Director of Stores, leaving to the Accountant-General a power of "review," and that this power was subsequently abolished when the audit was confided to the Comptroller and Auditor-General. Subsequent to the report of 1887 by the Royal Commission on Civil Establishments, and in view of the recommendations of the Committee upon the Navy Estimates, a Committee was appointed by the Treasury to investigate anew and report upon matters relating to the preparation and review of the Navy Store and Expense Accounts. The Select Committee's report, of May 27th, 1889, which, with the Treasury Minute of July 2nd, 1889, approving its recommendations, was printed as an appendix to the Public Accounts Committee's fourth report for that year,[1] was favourable to the changes which had been made in

[1] Parliamentary Paper, No. 259, of July 17th, 1889.

transferring the Naval, Victualling, and other Store Accounts from the Accountant-General, and the following general conclusion was arrived at in paragraph 39 of the report:

"The liability of the officers respectively responsible for the Store and Expense Accounts to the absolutely independent review of the Comptroller and Auditor-General for the information of Parliament, of the transactions represented therein, and their further liability to answer before the Public Accounts Committee for any defects or irregularities which come under his notice, will afford a guarantee, which nothing else could make fully effective, that the higher departmental officers who are answerable for the supervision of the machinery by which the regulations are meant to be enforced shall keep that machinery in constantly efficient working order. It will also no doubt incidentally contribute to strengthen very much the control of the Admiralty itself in its administration of the Service."

The check of the Comptroller and Auditor-General has recently been further extended, in that he has been empowered to take stock in any case where, from any suspicion or apprehension of error, or other cause, he may deem such a measure desirable or necessary. He now has power to require that stock shall be taken in the presence of himself or his officer. The hands of the Comptroller and Auditor-General are thus strengthened without any undue responsibility being cast upon him, and without the responsibility of the departmental officers being impaired.[1]

The Naval Store Department has a very important function. In the first place, the Department embraces the custody, maintenance, and issue of naval, as distinguished from victualling and ordnance, stores, for use in the home and foreign yards and depôts, that is, for the building, fitting, and repairing of warships, but not such stores as belong to the Department of Works. In the

[1] Vide Fourth Report of the Committee of Public Accounts, 1894, p. x.

same way the Naval Store Department receives and issues stores for ships and vessels in commission and reserve, a great array of objects and necessaries, such as coal, boats, lubricant oils, rope, canvas, tools, locks, files, hinges, paint, varnish, etc. The Department has also charge of naval stores for the Royal Naval College, Greenwich, the College at Portsmouth, the *Britannia* at Devonport, the Engineering College at Keyham, and for mercantile training ships, seamens' barracks, coastguard stations and watch vessels, mercantile cruisers, Royal Naval Reserve batteries, naval prisons, etc., as well as of stationery, periodicals, etc., used afloat and ashore, save in the case of religious and associated books and periodicals, which are issued to ships by the Victualling Department. In regard to all these matters the Director of Stores is accountable under the Controller for the maintenance of authorized stocks at home and abroad; and he is also responsible for the custody and accounting for the receipt and issue of launches, pinnaces, cutters, and machinery, as well as of gun mountings, purchased under Vote 8, Section 3, for the stock of which the Director of Naval Construction, the Director of Dockyards, and the Director of Naval Ordnance are severally responsible. Any deficiency of stores is at once reported to the Controller, and the Director keeps such books as enable him readily to estimate the quantity and value of the various articles in the naval establishments.

To the Director of Stores falls also the important duty of framing the annual estimates (Vote 8, Section 2) of requirements in his department. The stores, as I have indicated, fall roughly into two classes, the first consisting mainly of goods and objects exclusively for constructive purposes, such as plates, armour, forgings, castings, etc., and the second of such stores as are used indiscriminately for shipbuilding work, and for ships in commission or reserve, of which paint, varnish, and oil are

examples. In dealing with the estimate for the first class, the Director of Stores obtains information from the yards as to the probable requirements under the shipbuilding programme, ship by ship, so as to avoid procuring any excess of materials or stores. In regard to the second category of articles, of which there is a large consumption, the stocks, the demands, and the estimates are alike based upon knowledge of the average expenditure of past years, modified by consideration of any special circumstances. For such articles each of the home yards sends up an annual demand before the estimates are prepared, showing the existing stock, the expenditure, and the probable requirements. Taking this and other information into account, the Director of Stores is enabled, according to his instructions, to prepare statements of the amount of stores in hand, and of the quantities and kinds he proposes to be purchased, and he arranges for the proper apportionment of stores among the several yards, consulting beforehand the Director of Naval Construction and the Director of Dockyards as to the quantities of shipbuilding materials likely to be required, so that no delay may occur in constructive work, and yet that no excessive stocks may accumulate.

When the necessary stores are provided for in the Navy Estimates, the Director of Stores forwards requisitions for the purchase of them, as may seem best, to the Director of Navy Contracts, an officer whose work I have yet to describe, acting under the Financial Secretary, but at the same time under the superintending Lords of the Departments for which his purchases are made. The Director of Stores must keep himself informed of the expenditure of money voted for the purchase of naval stores, as well as of the increment arising from the sale of stores, etc., so as to be in a position to guard against any deficit in the vote, and in case of such probable deficit, or of surplus, to give the Board timely warning. Once a month

he furnishes the Controller and the Accountant-General with a report on this head. In short, the regulation of liabilities and expenditure forms a large part of his occupation. To him also return is made of the local purchases and sales of stores, which he checks in regard to the necessity or otherwise of the operations, reporting irregularities, the financial consideration resting with the Director of Navy Contracts.

Outside these important duties the Director of Stores has the supervision, with foresight, of the methodical and rapid working of his department. Thus he sees to the timely shipment of stores, and, for this purpose, directs the movements of storeships and yard craft, being "careful to provide for Her Majesty's ships on foreign stations, and for the necessary supplies to foreign yards." It is his duty to note the results of trials or experiments with new descriptions of stores, and he justifies his responsibility for the due supply of stores by frequently visiting the dockyards and depôts, or despatching his assistants for that purpose; and he examines the storehouses to see that they are well kept, properly arranged and ventilated, with their contents sheltered from deteriorating influences, that the storehouse men understand and perform their duties, and that proper accounts are kept. At the same time stock-taking is continuously carried on in order to guard against irregularities, and the sale of useless stores is supervised. The Director of Stores has much other accounting work to do. A very important business that falls to him—re-transferred from the Accountant-General's Department a few years ago—is the examination and passing of the naval store accounts of ships, and also those of dockyard and naval prison officials at home and abroad, and he is held responsible for furnishing the Comptroller and Auditor-General, and the Public Accounts Committee with explanatory information connected therewith. Again, he is to be ready upon all occasions to furnish such periodical

or other returns to the Controller and the Financial Secretary as may be called for.

In addition to the responsibilities described above, which, save in some particulars, are to the Controller, the Director of Stores is supervised, in regard to the supply of coal to the Fleet, by the Junior Naval Lord, who is charged with that very important work. Accordingly, the Director of Stores is instructed to keep himself acquainted with the movements of warships, and with the quantities of coal issued from and remaining in the depôts from time to time, and to make a monthly return to the Board thereon, accompanied by such proposals for alterations in quantities intended to be shipped as the movements of ships may render necessary. Remembering the great extent of our fleet, the manner in which our ships are distributed on distant stations throughout the world, the contingencies that have to be provided for, and the absolute dependence of warships upon coal supply, it will be seen that the Director of Stores has here a task of great magnitude, and of supreme importance for the practical efficiency of the Navy.

The last principal officer of the Controller's Department with whom I have to deal is the *Inspector of Dockyard Expense Accounts*, whose duties, briefly put, are to keep a careful record of the expenditure at the Dockyards, to supervise the expense accounts, and see that they are clear, trustworthy, and promptly prepared, so that the progress of expenditure, in comparison with estimates, on authorized outlay may be closely watched by the Controller; and the Inspector is further generally to review and report upon the expenditure for which the Controller is responsible, especially such as cannot be debited to the cost of ships and manufactures. The office of Inspector of Dockyard Expense Accounts dates from 1886, in which year the report of Vice-Admiral Graham's Committee on Dockyard Management was presented to Parliament. That

Committee, in addition to pointing out the inadequate supervision of dockyard labour, the waste both of labour and material, the idleness, defective management, duplication of accounts, over-employment of clerks, and useless operations that were found at the dockyards—a state of things which the appointment of Director of Dockyards was designed to remedy—reported that the yard accounts were unaudited, that the accountant was at the mercy of the professional officers, and that there was no independent guarantee that the accounts represented actual facts. Accordingly, the Inspector of Yard Accounts was appointed in January, 1886, as representative at the yards of the Accountant-General of the Navy, in that officer's capacity as deputy and assistant to the Parliamentary and Financial Secretary, in order to make effective criticism of dockyard expenditure possible. The accounts prepared by this officer were found exceedingly valuable, for, based upon wage sheets and returns of the issue of stores, they enabled the details of expenditure to be followed without difficulty. But in January, 1887, the Controller of the Navy recommended that the Inspector of Expense Accounts should be regarded as representing both himself (the Controller) and the Accountant-General of the Navy. Various reports followed, with the ultimate result that the Inspector was transferred altogether from the Accountant-General's Department, and came to represent the Controller only. The practical gain was considerable; and I have shown above, in relation to the Director of Stores, what is the nature of the financial check. The detailed character of the accounts now enables the Controller to exercise careful supervision over expenditure and the attribution of funds to special purposes. The key of the system is that each week a return is presented showing the whole of the expenditure for labour and materials in each department of the dockyard, distributed over the various ships and services of the yard. The accounts are kept closely up to date, and, by their definite

and detailed character, enable the cost to the nation of any particular ship, completed or in hand, to be arrived at quickly and without difficulty. The inspection is rather a professional than a purely financial one, being necessary to the Controller to enable him to bring about a right allocation of the funds voted for his department upon the Navy Estimates. The system of financial control, with the review of naval expenditure generally, will find its place in a later chapter.

CHAPTER V.

THE ADMIRAL SUPERINTENDENT OF NAVAL RESERVES. — THE DEPUTY ADJUTANT-GENERAL OF ROYAL MARINES. — THE MEDICAL DIRECTOR-GENERAL.—THE CHAPLAIN OF THE FLEET.

As I have explained, the supply of officers and the manning of the Navy are within the province of the Second Sea Lord, and I showed that the Secretary's Department forms a main channel for his operations. Two very important officers of the Admiralty are also under the same Lord's supervision for carrying on this vitally important work, viz., the Admiral Superintendent of Naval Reserves, and the Deputy Adjutant-General of Royal Marines, the former charged with the important duty of organizing, inspecting, and mobilizing for service the secondary personal resources of the Navy, and the latter with the staff duties ashore of that admirable force which is so closely associated with the good work of our seamen afloat.

The *Admiral Superintendent of Naval Reserves* is placed in command of the Coastguard, and charged with the duty of generally supervising and controlling the Coastguard service afloat and ashore, as well as the Royal Naval Reserve. He is also instructed to co-operate with the Customs and the Board of Trade in seeing that the Coastguard is vigilant in the protection of revenue, and the repression of smuggling; in saving and guarding life and property; and in its duties in relation to the protection of home fisheries. The Coastguard, in short, is a reserve of the Navy—that to which resort is first had

upon mobilization—consisting chiefly of former seamen-gunners, and other trained men, commanded by executive officers of the Navy who have elected to serve with the force. It is a body of about 4,000 men, appointed for preventive service upon the coasts, and the headquarters of its Divisions are at Harwich, Hull, Queensferry, Greenock, Kingstown, Tarbert, Holyhead, Portland, and Southampton. Upon mobilization the Coastguardsmen would be drafted to complete the complements of the ships that were but partially manned, and their staffs transferred to barracks and drill-ships, to embody and fit for service the naval pensioners and the men of the Royal Naval Reserve.

The appointment of the Admiral Superintendent of Naval Reserves dates from 1874. Before the year 1857 the Coastguard was attached to the Customs Service for revenue duties, and was under the Controller-General of the Coastguard. The difficulty of getting good men at the time of the Russian War made the defects of this system apparent. The condition of the force was, indeed, far from satisfactory, but, after the transfer to the Admiralty, the Coastguardsmen becoming a reserve of seamen of the Navy, their quality was gradually improved. Admiral Eden told the Select Committee of the House of Lords on the Board of Admiralty, 1871, that, as Controller of the Coastguard, it had been his practice each year to go round the whole coast of England, Ireland, and Scotland, see every man of the force, and inspect every Coastguard cruiser. One of the changes introduced under Mr. Childers' administration was the abolition of the office of Controller of the Coastguard, and, with it, that of Deputy Controller, and the work of inspection and control was then carried on under the authority of the First Naval Lord. In January, 1869, Captain Willes was called to the Admiralty to assist the First Naval Lord in conducting the duties of the Coastguard and the Royal Naval Reserve, as well as

to give general assistance in other matters, and, in October, 1870, was confirmed in office with the title of Chief of the Staff. His duties were to superintend the Coastguard, as well as first reserve ships, tenders, and drill-ships of the Royal Naval Reserve, and to take charge of the management and supervision of the Royal Naval Reserve, the Royal Naval Volunteers, and the Seamen and Marine Pensioners' Reserve. The Chief of the Staff had also a large share in the business of manning the fleet. It will be remembered that, at this time, the office of Second Naval Lord was in abeyance. The Chief of the Staff was generally occupied at the Admiralty, but commanded the Reserve fleet on its annual cruise. The inspection of the Coastguard was intrusted to the Commanders-in-chief afloat as the men were embarked. At the same time the improvement of the force was continued, and the remainder of the civilians in it removed, while the Royal Naval Reserve, which had been instituted as a great experiment, was weeded and strengthened.

The office of Chief of the Staff was continued but for a brief term, and, by Order in Council of December 12th, 1874, an Admiral Superintendent of Naval Reserves was appointed to take charge of the Naval Reserve afloat, including the district ships, formerly called Coastguard ships, but since 1861 known as First Reserve ships, which then gave a force of nine ironclads ready at short notice for active service. He was also given charge of Coastguard stations ashore, the Royal Naval Reserve, the Royal Naval Artillery Volunteers, and the Seamen Pensioners' Reserve. A later instruction of the Board directed him to co-operate with the Commissioners of Customs and the Board of Trade in all measures necessary for the protection of revenue, saving and guarding life and property from wrecks, and the protection of fisheries. He was instructed to visit from time to time the district ships and coast stations of the Coastguard, and the drill-ships and batteries of the Naval

Reserve. He was to submit to the Board promotions to the rank of Chief Officer, and the removals from station to station of the Inspecting Officers of Divisions, but promotions below the rank of Chief Officer were to be made on his own responsibility. The Admiral Superintendent was also instructed to visit mercantile training ships to take account of the training given, it being a wish of the Admiralty to admit suitable boys both to the Navy and the Naval Reserve. A final instruction was to keep the district ships ready and efficient for mobilization, with complete arrangements for making up their sea-going complements.

This outline of the Admiral Superintendent's instructions will show that—while exercising, in peace time, a high function of the Navy in keeping the peace and preserving the safety of the seas, in ministering to the welfare of the fisheries and the mercantile marine, and in protecting the Customs revenue of the country—he pursues the great work of preserving efficient the Naval Reserves in readiness for the war needs of the State. His operations are thus of far-reaching significance, and it will be seen that he must play a notable part in any mobilization of the fleet.

Important as are the duties of the *Deputy Adjutant-General of the Royal Marine Forces*, it will not be necessary for me to dwell upon them at any length. That admirable body of men, the Royal Marine Light Infantry, with its training depôt at Walmer, and its divisions located at Chatham, Portsmouth, and Plymouth, and the Royal Marine Artillery, with its headquarters at Eastney Barracks, near Portsmouth, is a very valuable part of our naval personnel. Alternating their service between the shore and the fleet, the Marines are trained as soldiers, and to a considerable extent as seamen. Through the devotion of their officers and the thorough training of the men, they render most substantial service on board our ships. To deal with the entire economy and detailed

service of the Marines, however, is beyond the scope of the present volume, and it must suffice to say that, with an establishment of 15,500, including 2,679 artillerymen, the force is maintained in a style of admirable efficiency.

When serving afloat, the Royal Marines are governed by the Naval Discipline Act, and are under their own officers, but subject to the captains of the ships in which they serve. Ashore, they are under the Army Act, and, so far as the exigencies of the training under Admiralty orders will admit, they take part under the general officer commanding the military district, in military manœuvres and garrison duty in common with the other troops under his command. But, in regard to pay, interior economy, inspection and discipline, the Royal Marines are independent of that officer, and are under Admiralty regulations, enforced by the Deputy Adjutant-General, Royal Marines, who is supervised, as I have said, by the Second Sea Lord. A general commanding, for example, is not empowered to inspect Marine barracks, nor even to enter them without consent. Neither can he order a single man of the Marines on any duty without the authority of the Admiralty. If it were otherwise, the Marine forces would not be truly at the disposal of the Naval service upon emergency. The work of the Deputy Adjutant-General is accordingly to execute the orders of the Admiralty Board in relation to the forces under his command, to take charge of the Marine Recruiting Service, and to maintain these forces in the state of high efficiency to which they have been brought, and in readiness for immediate service if required. His Department at the Admiralty is noteworthy in this respect, that it numbers no civilian officials.

With the Departments of the Admiral Superintendent of Naval Reserves and of the Deputy Adjutant-General, Royal Marines, I conclude my survey of those parts of the Admiralty "machinery" which are devoted to the work of constituting the personnel of the Navy afloat.

Other officers of the Admiralty are occupied in duties to the personnel so raised. Thus, the Director of Victualling conducts operations of such magnitude as to demand a special chapter for an account of his department. The *Medical Director-General of the Navy*, of whom I propose now to speak, is an officer also of great importance. The health and hygiene of the fleet, and the surgical attendance upon the personnel, both in peace and war, are wholly in his hands. The Physician-General of the Navy was one of the five Principal Officers to whom, under the Order in Council of June 27th, 1832, the work of the Navy and Victualling Boards was transferred. His title was changed to that of Director-General of the Medical Department in 1843, and he had charge of all medical stores, medicines, and instruments, and superintended all professional duties connected with the various medical establishments.

The Medical Service of the Navy, over which this officer presides, is constituted of officers qualified under the Medical Acts, and admitted to the Navy after a severe physical examination, and further examination in medicine, surgery, anatomy, physiology, chemistry, and materia medica, conducted by a board of medical officers under Admiralty regulations. Formerly, medical officers so accepted were put through a course of training at Netley, to the support of which medical school the Admiralty paid a contribution of £2,500 annually, but the system had disadvantages, and did not form a good introduction to naval life. There was need also for special training in the hygiene of modern ships, and the examination of naval Victualling Stores. Accordingly, the Haslar Hospital was made a teaching centre, through which naval medical officers now pass preparatory to going afloat, and where the sick-berth staff is trained. Surgeons are appointed to ships of war in numbers proportionate to their complements, and, upon return from commissions abroad,

they are passed through Haslar and other naval hospitals for varying periods of service. Changes in the Department have made the medical branch of the Navy popular. The position of surgeons was much improved about 1859 under Sir John Packington's administration, and again in 1866 and 1875. In 1881 a new Warrant, giving satisfaction to the service, was issued upon the report of an Admiralty Committee, presided over by Sir Anthony Hoskins, which decided anew the pay and position of medical officers.

The Medical Director-General is supervised by the Junior Sea Lord, and is responsible under the Board for the administration of the Naval Medical Service both afloat and ashore, and is the appointed adviser of the Board on all questions connected with the appointment and promotion of medical officers, and of the nursing sisters and sick-berth staff. He is charged with the superintendence of all professional and administrative details in regard to the medical establishments; and is responsible for maintaining the necessary stores of articles required for the service. He has to prepare the estimates (Vote 3), and to watch the expenditure for the Medical Service so far as wages and stores are concerned, and is responsible for the examination of the Medical Store Accounts, which, as is the case with Naval and Victualling Stores, have been transferred from the Accountant-General's Department. For this work an audit branch was added to the Medical Department. He has, also, to prepare for publication the Medical Statistics of the health of the Navy, a work of much importance, to which great attention is paid.

The Director-General of the Medical Department is not a purchasing officer. All contracts are entered into by the Director of Contracts, whose department I have yet to deal with, and the conditions of supply generally resemble those which prevail in the Naval Store and Victualling

Departments. Before the Select Committee on the Navy Estimates, 1888, the Medical Director-General stated, in illustration of the methods of supplying the fleet, that medical stores were always ready packed at Haslar Hospital for 6,000 men, at Plymouth for 9,000, at Malta for 15,000, at Chatham for 4,000, at Deptford for 5,000, at Hong Kong for 3,000, and so on at other stations, stores liable to deterioration being regularly removed and replaced by others. The medical establishments of the Navy are the Royal Hospitals at Haslar, Plymouth, Yarmouth, Haulbowline, and Chatham, the Royal Marine Artillery Infirmary at Portsmouth, the Royal Marine Infirmaries at Portsmouth and Walmer, the Royal Marine Barrack Dispensary at Plymouth, the Royal Naval Barracks at Sheerness, the sick quarters at Portland, and at Dartmouth for the *Britannia*, and the establishments at Malta, Gibraltar, Bermuda, Halifax, Jamaica, Ascension, the Cape of Good Hope, Hong Kong, Yokohama (sick quarters), Esquimalt, Coquimbo, Trincomalee, and Sydney.

It remains now, in this chapter, to allude to the *Chaplain-General of the Fleet*, who, in addition to his duties in regard to the chaplains in the service, carries on an important work in supervising naval instructors and naval schools, in relation to which duties he bears the further title of *Inspector of Naval Schools*. Between the Chaplain-General and a portion of the staff of the Royal Naval College, the duties formerly exercised (1864-74) by the Director of Education are now divided. In regard to naval schools, the Chaplain-General is supervised by the Second Sea Lord, and in regard to chaplains and naval instructors, by the Junior Sea Lord.

THE BOARD ROOM AT THE ADMIRALTY, 1808.
(*Pugin and Rowlandson.*)

CHAPTER VI.

THE DIRECTOR OF VICTUALLING.

THE subject of the victualling of the fleet forms one of the most curious chapters in naval history. All the old chronicles and pamphlets are filled with the story of pestilence bred by the consumption of noisome provisions, rancid bacon, stock-fish fouled by bilge-water, maggoty bread, and sour beer not seldom stored in old oil or fish-casks. Many a time, too, even such food as this was not available, and "refuse and old stuff," or, still worse, empty bellies, goaded men, who, sometimes, as in the days of Charles I., had "neither shoes, stockings, nor rags to cover their nakedness," to "voice the king's service worse than galley slavery." How intimately mutiny and disaffection in former times have been associated with the character, or the dearth, of provisions in the fleet, is well known to readers of naval history. The picturesque conditions that arise out of "banyan days," and the eating of salt junk, weevily biscuit, and other like food, have been seized upon by the naval novelist, and, through this channel, a record of the old discomforts of the fleet is embodied in our literature.[1] It is pleasant, therefore, to note the astounding change which has passed over naval

[1] "Banyan days:" days (Mondays, Wednesdays, and Fridays) on which no meat was issued—an enforced abstinence done away with in 1824. Some of the other discomforts alluded to yet existed when I first went to sea.

victualling, an abundance of good, wholesome, fresh food, well cooked, and decently served, now contributing vastly to the health and contentment of the men.

Before the introduction of the reforms of 1832 the business of victualling the fleet fell to the Navy Board and the Commissioners of Victualling. In Elizabeth's days it had been managed by contract under the Surveyor-General of the Victuals, and the system of contract was long continued, though from time to time the Commissioners of the Navy took the charge of victualling into their own hands. When the duties devolving upon the Navy and Victualling Boards were brought, by the reforms of Sir James Graham, under the direct control of the Admiralty, one of the five Principal Officers appointed under the Board was the Comptroller of Victualling and Transport Services, who was charged to superintend the providing, issue, and duly accounting for all the provisions, victualling stores, clothing, marine necessaries, etc., required for the use of the fleet, the marines, and the convict service, and also for troops in foreign garrisons. The transport duties were detached from his office, and placed under a Director of Transports in 1862. When the changes of 1869 were brought into force, the office of Comptroller of Victualling, with that of Storekeeper-General, was abolished, and the purchasing powers hitherto belonging to it were transferred to the newly-created Contract and Purchase Department, and the examination of accounts to the Accountant-General, while the store-keeping functions were vested in the Superintendent of Victualling, whose title was subsequently changed to that of Director. Some other changes have subsequently been made. The examination of the various store accounts, which was concentrated in 1870 in the hands of the Accountant-General, whose position, in regard to financial criticism, was strengthened by the Order in Council of November 18th, 1885, did not, under that system, work well for the

efficient handling of the vast mass of stores either under the control of the Director of Victualling or the Director of Stores. In March, 1886, three months after the Accountant-General had been formally invested with his supervising function, the Admiralty accordingly transferred the examination of store accounts to the departmental officers; and, through subsequent changes, the power of "review," which remained with the Accountant-General, ceased to operate. The reasons for this alteration will appear subsequently in this chapter. The financial aspect of the question has already been dealt with in the chapter upon the Director of Stores, and will be further explained when I come to deal with the business of financial control.

Briefly stated, the Director of Victualling is responsible under the Board, and under the supervision of the Junior Naval Lord, for regulating the proper supply, care, and preservation of all victualling and clothing stores for the Navy, including the mess-traps and seamen's utensils, the interior lighting of ships, and the ships' libraries. He is also charged with the management of the victualling yards and depôts, the examination and passing of all accounts of the expenditure of victualling stores whether at home or abroad, and the appointment and arrangement of the staffs in the establishments. Further, the Director prepares the whole of the estimates for victualling and clothing, being responsible for the Victualling and Clothing Vote (Vote 2), save certain minor sub-heads (salaries and allowances, wages of police, rents, water, and contingencies, etc., and Marine clothing, appointments, allowances in lieu, and barrack stores), which are under the Accountant-General and the Deputy Adjutant-General of Royal Marines.

The preparation of the estimate for the wants of the year is one of the most important duties of the Director of Victualling. The chief victualling yard at home is that at Deptford. The other principal yards are at

Portsmouth and Plymouth, with a small depôt at Haulbowline (Queenstown), and there are depôts abroad at Gibraltar, Malta, Halifax, Bermuda, Jamaica, the Cape of Good Hope, Trincomalee, Hong Kong, Esquimalt, Bombay, Ascension, Coquimbo, and Sydney. The extent of the reserve stocks to be kept in hand at the depôts is in the discretion of the Admiralty Board, and is varied from time to time, dependent upon the number of ships and the minimum stock on the stations, or upon other causes, and calculated on the average issues. The maintenance of these reserves, as affected by the amount to be consumed, which, of course, is calculated upon the vote for men, is the basis of the estimate prepared by the Director of Victualling. If at any depôt the stores should be depleted, his estimate will provide for making good the deficiency; if there should be a surplus, the vote will be proportionately reduced. The reserve stores and the quantities to be eaten are thus inseparably bound together, but, for the efficient supply of the service, they must be regarded independently. The first consideration is of the quantity likely to be consumed, and this is arrived at by experience of previous years, and by accounts furnished regularly by the depôts at home and abroad. Many disturbing circumstances have to be weighed in forming the estimate, as, for example, the amount of local purchases abroad, the number of men paid allowances in lieu of being victualled, the amount paid to the men as "savings,"—that is, money allowance paid for any article of ration not consumed—the condemnation of stores in all parts of the world, and waste and loss of stores on board ship and during transport. Having taken into consideration the number of men, and disturbing elements such as I have indicated, the Director of Victualling—having before him estimate stock valuations taken towards the end of the year, in anticipation of the annual stock valuation made on April 1st—is able to frame his estimate for the Victualling Vote. The general

arrangement made for supply is in view of time of peace, but the Admiralty has, necessarily, in consideration the contingency of war. The Director of Victualling is in communication with the Director of Naval Intelligence and the Director of Transports upon matters relating to this contingency, and the commanders-in-chief on foreign stations have instructions in this regard. As a matter of fact, there are stations where a much larger supply of stores is maintained than is called for by the ordinary victualling of the fleet. Malta is an example, where large stocks are kept up by arrangement between the Admiralty, the War Office, and the Colonial Office.

The preparation of the estimate is the first step in the victualling of the fleet, but the Director of Victualling is not a purchasing officer. The work of purchasing is undertaken by the Director of Navy Contracts, upon whom the Director of Victualling indents for necessary supplies, providing a specification setting forth exactly what is required. In this way the clothing and other stores are bought by contract, but the system varies a little in regard to some perishable articles, such as fresh provisions, meat, and vegetables, both at home and abroad. But here, again, the work is carried on largely by running contracts through the Director of Navy Contracts. There are, of course, some classes of stores in regard to which it is necessary to look well ahead in order to buy them advantageously. Certain victualling stores—biscuit, chocolate, mustard, pepper, cooperage articles, and oatmeal—are manufactured by old custom in the victualling yards; biscuit and cooperage articles at Deptford, Gosport, and Plymouth, oatmeal at Deptford and Plymouth, and chocolate, mustard, and pepper at Deptford. The Navy biscuit is famous for its quality, it having appeared, for example, upon the Transport inquiry after the Egyptian campaign, that the biscuit was of much better value than could be bought elsewhere. Mustard and other stores continue to be manufactured as

in former times, the mustard, at least, having originally been introduced as an anti-scorbutic.

An interesting justification of these manufactures will be found in John Stuart Mill, who quotes Mr. Babbage's maxim that Government can purchase any article at a cheaper rate than that at which it can manufacture such article itself; but points out, nevertheless, that it has been considered more economical to build extensive flour-mills (such as those at Deptford), and to grind corn, rather than to verify each sack of purchased flour, and to employ persons in devising methods of detecting new modes of adulteration which might be continually resorted to.[1]

The principal victualling yard, as I have said, is at Deptford, and there, as at the other receiving yards, all stores sent in are inspected by the proper officers, and are thus either passed or condemned, the Director of Victualling, through his officers, being responsible that no defective stores are accepted for the fleet. The vast bulk of the victualling stores—all the clothing material, for example—is passed through the Deptford yard. It may be interesting in this connection to note that the total loss through condemnation of stores, principally of those returned from ships, is about one per cent. on the gross amount, not allowing for money received for such rejected stores as are sold out of the service.

The stores being, as I have described, estimated for, purchased, and received at the yards, the work of issuing them begins. The Director of Victualling is responsible for the filling up of the foreign depôts, as of the depôts at home. Monthly accounts of the stores from abroad apprise

[1] The whole quotation, a very interesting one, will be found in the "Principles of Political Economy," vol. i. p. 137. There is a biscuit now at the Admiralty which was baked at the Royal Clarence Yard in 1852, and was in the possession of a naval officer until 1894. It is still perfectly fit for consumption.

him of the stocks in hand, and, without requisition being made, he issues the supplies in accordance with the necessities to the various depôts. Demands for victualling stores are then sent to these depôts from ships in all parts of the world, and, provided they are such stores as are allowed, they are delivered into the charge of the ships' paymasters. The victualling officers at the depôts have no discretion in regard to the quantities issued, and it would be a mistake to give them any. Commanding officers of ships, or commanders-in-chief on stations, being responsible for the efficiency and readiness of their ships, can alone be responsible in this matter. Some years ago there was a condemnation of 50,000 lb. weight of biscuit rendered unserviceable in the *Hecla* and *Neptune* in the Mediterranean, which biscuit had been taken on board in accordance with the requisition of the commander-in-chief. It is impossible to take such power away from the commander-in-chief. It is his responsibility to have his ships in a proper state to carry out the orders of the Admiralty, and he must therefore be prepared for contingencies. As Mr. Yorke, the present Director of Victualling, said before the Select Committee on the Navy Estimates, 1888, in relation to this case, it was no mistake to have an excess stock in view of possible contingencies, "because you might as well say that a man was foolish for having insured his life because he had not died." The condemnation of stores afloat is made upon the survey of officers appointed by the commander-in-chief on the station where the complaint arises. If they are destroyed, the responsibility rests with him; but if, otherwise, they are returned to the victualling yard, they are re-surveyed by the officers of the yard under the responsibility of the Director of Victualling.

I have alluded above to the question of "savings," a matter which largely affects the issue of victualling stores. It is open to a man, in regard to most classes of food, to

take a money payment in lieu of a certain proportion of his ration, and officers and men who live on shore, and are borne upon ships' books, also receive an allowance in lieu. Another interesting point that deserves to be noticed here is that, while a marine afloat is victualled in the same manner as a bluejacket, his treatment ashore is that of a soldier, his ration then being of bread and meat, for which $4\frac{1}{2}d.$ per diem, whatever may be the value of the rations, is deducted from his pay, and he also has an allowance of $1d.$ a day for beer.

Though the Director of Victualling has no practical discretion, through his officers, in regard to the issue of stores to ships, provided those stores are in accordance with the Queen's Regulations, he checks the consumption very carefully. This is done by making a critical scrutiny of the periodical accounts of ships' paymasters, and of other officers throughout the world who have victualling stores in their possession. By careful examination of these individual statements of paymasters and storekeepers, ship by ship and day by day—which accounts are of the expenditure of stores, and are not pecuniary accounts—and by investigating the condemnations made, economy becomes possible. It is the duty of the Director of Victualling to carefully watch and check condemnations, and to see that stores are not irregularly dealt with; and the quarterly accounts which reach him are the means of his doing so. The system is a good one, forming an excellent barrier against peculation and fraud.

Up to 1869 the store accounts, as I have said, were wholly in the hands of the Comptroller of Victualling, but from that time to 1885, they were dealt with by the Accountant-General. The arrangement presented anomalies, for it left, practically, to the Accountant-General the consideration as to what points should be referred to the Director of Victualling. There were many matters which could only be treated satisfactorily by the officer in charge of

the Department, and when the examination of accounts was re-transferred to the Director of Victualling in 1886, some irregularities, as is not surprising, were discovered. The arrangement then made was that the accounts, having been examined by the Victualling Department, should go for final review or audit to the Accountant-General of the Navy, but this system was considered unsatisfactory on the ground that the Accountant-General, as an Admiralty officer, could not fitly review Admiralty accounts. Accordingly the executive heads of the Victualling and other Departments presented a memorandum upon the subject in November, 1886; but, before further action could be taken, the Treasury directed that thenceforth the accounts should be passed before the Parliamentary Comptroller and Auditor-General for a test audit. The intermediate "review" of the Accountant-General would then have become a cause of friction and delay, as forming a double and yet inconclusive examination of the accounts within the Admiralty itself; and the Board therefore dispensed with this "review," and the Accountant-General of the Navy ceased to have any control over the expenditure of victualling and other stores. It consequently became a duty of the Director of Victualling to furnish the Comptroller and Auditor-General and the Public Accounts Committee with any explanatory information called for in connection with victualling store accounts.[1]

In addition to the examination of store accounts which has been described, the Director of Victualling prepares at the end of every month a statement explaining how the Admiralty stands in regard to the Victualling Vote, taking into consideration outstanding liabilities, in order to show how the money voted is running off. He is further

[1] In Part II. chap. iv. will be found the judgment of the Treasury Committee of 1889 upon the audit of store and expense accounts.

responsible for the supply of "mess-traps," or crockery, and so forth, to the ward-room, gun-room, and warrant officers' messes of Her Majesty's ships, for the interior lighting of ships, or for allowances in lieu, for the provision of soap and tobacco, for ships' libraries, and for many other items under the sub-heads of the vote, such, for example, as the stock, plant, and farming operations at Ascension. His duties, it will be seen, involve a wide survey of the necessities of the fleet, and an adequate system of supply. His department is subdivided for its efficient operations into two branches, the first, or executive branch, dealing with main executive questions, and with estimates and expenditure, and the second, or accounts branch—added after the transfer of the accounts from the Accountant-General of the Navy in 1886—with the office regulations and the depôt and ship accounts. As will be seen, the Department of Victualling is one of the first importance, in relation with subsidiary establishments all over the world, and is admirably organized for the rapid carrying on of its complex work.

THE NAVY PAY OFFICE IN OLD BROAD STREET, AS IT APPEARED IN 1816.

(From a Pencil Drawing by G. Shepherd, Crace Collection, British Museum.)

CHAPTER VII.

THE ACCOUNTANT-GENERAL OF THE NAVY.

THE Royal Commission on Civil Establishments, 1887, remarked with truth in its Report that the subject of the financial control of the great spending departments of the State is one of great difficulty and of high importance; and it proceeded to deal with the recent financial changes at the Admiralty as serving to elucidate the whole problem. I cannot do better than follow a similar course in order to illustrate the development of naval financial control. When I dealt in an earlier chapter with the constitution of the Board of Admiralty, I showed that the Parliamentary and Financial Secretary is responsible for the Finance of the Department, for the estimates, and for expenditure generally, the accounts, and the purchase and sale of stores, as well as for questions involving reference to the Treasury financially, and connected with the Exchequer and Audit Department, with other kindred matters. For the practical work of his Department he has under him the Accountant-General, who acts as his assistant, and the Director of Navy Contracts, who is also under the several Lords for whose departments purchases are made. The duties of the latter officer will be explained in the next chapter.

The position of the Accountant-General of the Navy, and the powers he exercises, have undergone successive changes, and have been the subject of much discussion and of inquiry before several committees. Some have

regarded him as an officer who should exercise financial control over the estimates, in the sense of criticising policy or holding economical authority and responsibility. Others have maintained that, as the head of an Admiralty Department, he could not exercise efficient control over Admiralty expenditure, and that he necessarily does not possess sufficient technical knowledge to criticise professionally the various causes of expenditure. From this manner of regarding the position of the Accountant-General arose the view that he should be a bookkeeper, and his Department one of clerical work. Mr. Childers, on the other hand, held that the Accountant-General should be in a position to advise the First Lord, through the Financial Secretary, on all financial questions, and that his advice and control are almost essential parts of good administration. Lord Northbrook, too, was of opinion that the Accountant-General should be quite free to offer any criticism or opinion that he was pleased to give upon Admiralty finance, broadly speaking, both relating to estimates and expenditure.

When the Civil Departments were reorganized in 1832, the Accountant-General of the Navy was one of the five Principal Officers then placed under the authority of the Board, and his duties were defined as consisting in keeping all books and accounts connected with the receipt and expenditure of the Navy, including those relating to the victualling and marine services, in seeing that all accounts were examined and supported by proper vouchers, that all stores supplied were in conformity with the terms of contract, and in preparing bills for the payment of claims by the Paymaster-General. In other words, the Accountant-General was yet a bookkeeper. His duties were limited to the examination of accounts, the payment of bills, and the recording of expenditure. He had no authority to keep a watch upon the expenditure or estimates of other Departments. The duties of the office

were, however, enlarged by the Order in Council of January 14th, 1869—that which made the Parliamentary Secretary, with the Civil Lord as his assistant, responsible for the finance of the department. As a consequence of this Order, as I have already explained, the store accounts, both naval and victualling, which before had been in the hands of the Storekeeper-General and the Controller of Victualling, were concentrated in the Department of the Accountant-General, who was vested with the power of criticising these accounts financially. But, although a further enlargement of that officer's duties in relation to records of liabilities and expenditure was made in 1876, he was as yet placed in no better position in regard to effective financial control. It was not the intention, said the memorandum of instructions, by the new arrangements of 1876, "that any check should be placed upon the individual action of the several departments in bringing under their Lordships' notice for decision any questions arising in the course of the preparation of those votes which are under their control."

The first definite step towards placing financial control in the hands of the Accountant-General was taken in 1879, when a memorandum, dated December 31st, laid it down that "the Accountant-General is to be consulted before any expenditure is incurred which is not provided for in the estimates, or before any money provided for in the estimates is applied to any purpose other than that for which it was so provided," and further that he was to be consulted on all proposals for altering pay or allowances, as regarded "the financial effect" of those proposals. From the conditions thus set up, considerable friction not unnaturally ensued, as was, indeed, shown in the report of a Departmental Committee, dated February 20th, 1884. Without creating friction, the Accountant-General, under these orders, could, in fact, scarcely have carried out his instructions; and the financial arrangements of the

Admiralty remained unsatisfactory. When Lord Northbrook left office in 1885 he left a memorandum, indeed, to the effect that under the then existing conditions he had felt the need of "permanent financial assistance," which frequent changes of Financial Secretaries had not given him. It had been his purpose, therefore, to make the Accountant-General assistant to the Financial Secretary, thus raising him from the position of an officer of account to that of a permanent officer of finance.

Some change seemed to be called for, since, no record of liabilities being kept, or furnished to the Accountant-General, it was a matter of exceeding difficulty to find out what Admiralty liabilities were. A Select Committee of the House of Commons appointed to report on this subject stated that "both the late and present occupant of the office concur that the Accountant-General has no financial control over the other departments," and that "the evidence before them proves the necessity of a much severer financial control, even when operations have to be conducted directly by the First Lord," and further, that "the position of the Accountant-General does not enable him to exercise any sufficient general supervision over expenditure, while there is no permanent high official especially charged with finance." The outcome of this criticism was the appointment of a Departmental Committee, which reported on September 23rd, 1885, that it was desirable that permanent assistance should be given the Parliamentary and Financial Secretary, in the direction of financial criticism and control, by placing the Accountant-General in closer relationship with him. The recommendations of the Committee were embodied in an important Order in Council, dated November 18th, 1885. The effect of the new disposition thus made, which took its effect from January, 1886, was to add largely to the Accountant-General's powers. Under the Financial Secretary, he was formally entrusted with a direct share in the prepara-

tion of the estimates, his written concurrence being necessary before the final approval of the individual votes, and each vote was to be referred to him in sufficient time, with explanations, for his concurrence or observations. He was to exercise a financial review of expenditure, and was to be consulted upon expenditure not provided for in the estimates, and before money voted could be applied to any purpose other than that for which it was provided. He was to see that expenditure was properly brought to account, and was to be regarded as "the officer to be consulted on all matters involving an expenditure of naval funds." In the office memorandum which accompanied the order, the Board remarked that, "in recognizing the Accountant-General themselves, and in calling upon the spending departments to recognize him to the fullest possible extent, as the financial officer who shall be referred to in regard to all proposals involving expenditure, a security will be given for the economical administration of naval funds which does not now exist."

Not all the advantages sought for by the Order in Council of November 18th, 1885, were attained. The opinion grew that good results could not be secured by subjecting the professional officers to the supervision of a permanent financial officer, implying the submission of their proposals to inexpert criticism, which would weaken their sense of responsibility. Mr. Main, Assistant Accountant-General, told the Royal Commission on Civil Establishments, 1887, that the effect of the Order in Council had been to give rise to friction, and that the result was far from satisfactory. "The tendency to withhold information, or to give partial information, coupled with the tendency to friction when questions affecting expenditure are raised accompanied by protests, even in cases where these questions are manifestly of a legitimate character, has been most discouraging, and has done much, in my opinion, to weaken financial control

of the really effective character contemplated by the Order."

Meanwhile, other causes had been operating to affect the new position and increased authority of the Accountant-General. Since 1870, as appears above, the examination of the naval and victualling store accounts had been entrusted to him; but, in March, 1886, three months after he had assumed his new powers, the Admiralty Board re-transferred the examination of the store-keeping accounts to the departmental officers, leaving merely a power of "review" with the Accountant-General. In the same way the newly instituted Dockyard Expense Accounts, as I remarked in a previous chapter, were ultimately transferred to the Controller of the Navy. At about the same time (November, 1886) the Treasury issued a minute that an independent audit of store accounts should be conducted by the Parliamentary Comptroller and Auditor-General; and this minute—I quote the Report of the Royal Commission on Civil Establishments—"was regarded by the Board of Admiralty as enabling them to dispense altogether with the Accountant-General's 'review,' and that officer ceased to have any further knowledge of, or power over, the stores."[1] Sir Gerald FitzGerald, however, the Accountant-General, who had concurred in the re-transfer of the stores accounts to the Director of Stores, the Director of Victualling, the Director-General of the Medical Department, and others, told the Royal Commission that he considered the change a very good one. "The work of my office is not store work, and it is much better that it

[1] In Chapter IV. of this Part I showed that a Treasury committee in 1889 approved the new arrangement made, and in the last chapter I gave the objections put forward by the several Departments to the principle of a "review" of store accounts by the Accountant-General intermediate between the departmental accounts and the audit of the Comptroller and Auditor-General.

should be restricted to finance." He further stated that the Order in Council of November 18th, 1885, had given him the control he would have thought desirable for his Department. The Royal Commission reported that in its opinion the Accountant-General of the Navy should be "the permanent assistant and adviser, on all matters involving the outlay of public money, to the Financial Secretary," and that the view of his duties embodied in the Order in Council was substantially just and wise; and further, that it could see no good reason for the abandonment of the intermediate "review" of store and expense accounts by the Accountant-General. Much evidence was also taken by the Select Committee on the Navy Estimates, 1888, before which the Accountant-General maintained that the audit of the Comptroller and Auditor-General weakened his financial control, and that the Order in Council of November, 1885, had for eighteen months been "practically a dead letter," while, on the other hand, the Parliamentary Secretary maintained that the provisions of the Order in Council were properly and duly observed, and that the Accountant-General was as well able to carry out his authorized duties as before the audit was undertaken by the Comptroller and Auditor-General. In the final disposition of affairs the stores accounts were left, as I have shown in previous chapters, with the departmental officers, and the Accountant-General ceased to exercise any check.

The instructions under which the Department of the Accountant-General of the Navy is conducted are contained in the Order in Council of November 18th, 1885, and an office memorandum of December 10th in the same year. By the first of these the Accountant-General is authorized to act as deputy and assistant of the Parliamentary and Financial Secretary.

"With this object he should be charged under the Parliamentary and Financial Secretary with the preparation of the Navy Estimates; with financially reviewing the expenditure

under those estimates; with advising or deciding as to any redistribution of votes or transfers which may from time to time be found necessary; with satisfying himself that such expenditure is properly allowed and brought to account; with advising on all questions affecting Naval expenditure; and that he should not only be made acquainted with expenditure after it has been incurred, but be regarded as the Officer to be consulted on all matters involving an expenditure of Naval funds."

The office memorandum which followed the Order in Council precisely defined the Accountant-General's duties as: (1) To criticise the annual estimates as to their sufficiency before they are passed, and to advise the Parliamentary and Financial Secretary as to their satisfying the ordinary conditions of economy; (2) to financially review the progress of liabilities and expenditure under the estimates; (3) to consider, in regard to dockyard expenditure, the proposed programme of construction, etc., that is, in regard to labour, material, and machinery; (4) to review the current expenditure or employment of labour and material, as distinguished from cash payments, at the yards; and (5) to review proposals to spend money on new work, or repairs of any kind, for which estimates are currently proposed. At the same time a Finance Committee was created within the Admiralty to assist the Financial Secretary, himself being president, and the Accountant-General vice-president. It was to bring into harmony the general financial policy of the Admiralty Department with the particular policy which might be adopted by the Board of Admiralty for the time being, and to secure to the Financial Secretary the possession, continuously, of the fullest information as to the progress and character of the financial operations of the department.[1]

The Accountant-General's Department is one of the

[1] A statement of the course pursued in the preparation of the several votes of the Navy Estimates will be found in Appendix III.

most considerable under the Admiralty. For its complex and detailed work it embraces three principal divisions—the Estimates Division, the Navy Pay Division, and the Invoice and Claims Division, occupied chiefly with clerical work. The Ledger Branch of the Estimates Division is charged with the great work of bringing all expenditure to book under the several votes and sub-heads of votes, and with preparing the all-important Navy Appropriation Account. In the Estimates and Liabilities Branch the Navy Estimates generally are prepared, after having been compiled and worked out under the immediate responsibility of the heads of the Executive Departments, who are responsible also for the administration of the several votes. The Ships' Establishments Branch keeps and furnishes records of establishments for estimate and other purposes, and prepares certain of the estimates; and the work of the Salaries Branch is sufficiently indicated by its title. The Navy Pay Division includes several branches. Its Full and Half Pay Branch, with a Registry Section, is charged with all matters relating to the pay of officers, and has its share in the preparation of estimates and returns. The Seamen's Pay, etc., Branch, exercises a Wages Audit on ships' ledgers of wages, and deals with the whole business of seamen's wages. There are also a Victualling Audit of payments or allowances in lieu of victualling, subsistence allowances while travelling, and field allowances; an examination of ships' ledgers, with related business; a Central Registry, which records the services, characters, ages, etc., of petty officers and seamen, and conducts other like business; and an Inquiry Office. The other branches of the Navy Pay Division are the Allotment Branch and the Naval Pension Branch. The Invoice and Claims Division conducts in several branches the examination and passing for payment or allowance of claims for material supplied and work done, travelling, and subsistence expenses, and other like

matters, with the audit of naval accountants in that regard. Finally, it deals with the wills of seamen and marines, the management of Naval Savings Banks, and questions relating to prizes and bounties.

It will be seen that the office of the Accountant-General of the Navy as permanent financial adviser to the Parliamentary Secretary, and the large share which he has in the final shaping of the Navy Estimates, give him a position of high importance in the conduct of Admiralty business, and that the influence which he is able to exercise in the direction of wise economy must be salutary, and of direct benefit both to the service and the country.

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CHAPTER VIII.

THE DIRECTOR OF NAVY CONTRACTS.

THE reader will have seen in the foregoing chapters that, save in regard to the hulls and machinery of ships, and, I may add, the chief requirements of the Director of Works, the heads of the Civil Departments of the Admiralty are not purchasing officers. The work of contract and purchase, except as specified, rests with the Director of Navy Contracts, who is under the Financial Secretary generally, and is also supervised to a limited extent by the Lords for whose Departments purchases are made. The new system dates from the re-organization of 1868-69, when the purchasing powers of the executive officers at the Admiralty were transferred to a newly-created Contract and Purchase Department, which was also charged with the sale of old and obsolete stores. Before that time the Storekeeper-General had bought for the dockyards, the Controller of Victualling for the fleet, the Medical Director-General for the Medical Department, and the Controller of the Coastguard for the Coastguard Service; but, at the time I speak of, the whole of these duties were concentrated in the new Purchase Department, supervised as above indicated, the executive head of the Department being the Superintendent of Contracts, whose title was afterwards changed to that of Director. The new system was found generally to work well. When a very large amount of stores was required for the re-victualling of Paris, 2,500 tons of food were despatched from Deptford and the two other yards in

three days, without the slightest detriment to the naval service, the stocks being made up with the greatest facility through the working of the new Department; and an officer of the Department was borrowed by the Lord Mayor, and despatched to Paris to supervise arrangements.

It is not necessary to enter here into many arguments that have been raised as to the system of contract and purchase. The practice is that the head of any Department requiring stores, naval, victualling, medical, or other, makes a demand for them to the Director of Contracts, who determines in what manner the same shall be obtained. On July 30th, 1883, the Board of Admiralty laid down a "general scheme for the purchase and sale of stores" for the guidance of the Director of the Contract Department and his officers, and the course then indicated is followed at the present time. The broad principle was that supplies should be obtained by public tender called for by advertisement; but, recognizing that this was not always a practicable procedure, the Admiralty indicated four courses as open. Advertised public tender was to be resorted to in regard to stores of a general character largely produced as ordinary articles of trade. Where articles were dealt in by a few well-known firms, or it was necessary to place the quality beyond dispute, or where quantities and value were small, tenders were to be sought by limited competition among selected firms. Patented articles or stores of small value might be purchased direct from first-class firms. Articles bought in the market, generally by public auction, were to be obtained through brokers. Contracts were to be made for the specific quantities required for each financial year, except for certain classes of articles, in regard to which running agreements, generally for a period of three years, were found advantageous.

In September, 1886, an Admiralty Committee was

appointed, under the presidency of Mr. A. B. Forwood, to inquire into the whole system of Admiralty contracts, including the procedure in regard to hulls and machinery, as well as into the organization and functions of the Department, and its relation to the executive departments of the Admiralty, the dockyards, victualling yards, and medical establishments at home and abroad, and with the users of stores and supplies. The Report of the Committee, with the evidence taken, was presented to Parliament in the following year. Generally, no objection was taken to the scheme, of which I have indicated the main features above, but the Committee were of opinion that it should not be regarded as a hard and fast regulation, but as one requiring constant revision to meet the varying conditions of trade. In their view the plan of intrusting the purchasing of the greater proportion of the Admiralty supplies to one officer was of advantage to the public service; but they found grave defects in the administration, owing to the want of co-operation between the Director of Contracts and the authorities requiring supplies, those who receive and examine them, and the users of the various articles. Their recommendations were largely directed to the removal of this evil, to improving the system of selecting firms to be invited to tender for stores required, mainly by giving the heads of departments a greater voice in the matter, to the devising of a better procedure in regard to the stores delivered, and generally to amending the business methods and establishing a stronger chain of responsibility for the correctness of particulars supplied to the Director of Contracts, the examinations of stores, and other matters.

In addition to these recommendations, the Committee advised that the operations of the Contract and Purchase Department should be so extended as to include, as far as possible, contracts for the hulls and propelling machinery of ships, and the requirements of the Works Department,

excluding only the hire of transports. In view of the great importance of the work of building warships and their engines, the Committee recommended that tenders, under this head, should be submitted to the full Board, after having been submitted to the members individually; but they had no hesitation in declaring that, subject to certain modifications of practice, the conclusion of all contracts, and the effecting of all purchases, should rest with the Director of Contracts, under the Financial Secretary, and the Supervising Lords. From this recommendation of the Committee, however, one of its members, Captain (now Vice-Admiral Sir Charles) Hotham, recorded his entire dissent, on the ground that the Director of Navy Contracts could have no knowledge whatever of the matters involved, and could not be expected to understand the specifications on which such contracts are based. From the change proposed, Captain Hotham expected that delay, friction, and inefficiency would arise.

The special recommendation in regard to ships, propelling machinery, and the requirements of the Department of Works was not, however, adopted; and, indeed, the report of the Committee did not lead to any material alteration in the system pursued. New instructions, which were drawn up in March, 1888, and presented to Parliament, were chiefly directed to clearing up certain special points and regulating some details of practice. The responsibility of the Directors of Navy Contracts was defined as "for the purchase of all stores, supplies, and machinery required for the use of Her Majesty's naval and marine forces and establishments, and for the conclusion of all contracts in connection therewith, excluding only contracts for ships and propelling machinery, and the following requirements of the Director of Works, viz.: purchases not exceeding £100 in value, and cement, materials, and machinery of a nature not used in the Dockyard Department." These latter exceptions, with the contracts for new

shore works and repairs, remained, and still remain, with the Director of Works.

It is under the instructions of 1883 and 1888 that the Director of Contracts carries on his operations. Requisitions for the purchase of stores are accompanied by all necessary particulars of pattern, make, description, and quality, and where articles are of a new design or character, specifications and drawings, or patterns, are furnished. Tenders are obtained and purchases made by one of the four procedures indicated above. Mr. Collett, Director of Contracts, told the Select Committee on the Navy Estimates, 1888, that tenders from selected firms represented fully half, or perhaps more, of the gross value of purchases, because they comprised articles like armour-plates, steel-plating, castings, and other articles involving the expenditure of very large sums. Tenders called for by public advertisement, he said, might probably represent two-thirds of the balance, while purchase by direct negotiation, chiefly for patented articles, would be but a small amount, and the same was the case in regard to purchase through a broker, save in the case of victualling stores, such as cocoa, rum, and sugar, which are bought on the market. In so far as victualling stores are concerned, arrangements exist, upon emergency, for securing vast supplies within a very few days, including great quantities of biscuit outside the ordinary naval resources.

In view of the very high importance of preserving good relations with contractors, so that many firms may be familiar with Admiralty requirements and the needs of the Navy, and be encouraged to furnish themselves with the necessary plant for producing naval material and stores, great interest attaches to the system of selecting the firms which are invited to tender. In this matter, rigid integrity, and whole-hearted devotion to the interests of the service, combined with a clear knowledge of the best ways in which those interests may be fostered, are

essential. Generally speaking, firms are placed upon the Admiralty list upon their own application. The Director of Contracts will assure himself as to their financial position, the Director of Naval Construction will send down an officer to inspect their establishments and to report upon their facilities for undertaking and satisfactorily completing Admiralty work, and, the reports being considered, a submission will be made to the Financial Secretary, with whom rests the decision as to whether they shall, or shall not, be added to the Admiralty list. The instruction is that, among limited tenders—and the practice is to be "encouraged in preference to general invitation by advertisement"—the principle of accepting the lowest offer, other things being equal, shall prevail. In practice, among firms on the Admiralty list, the lowest tender has not always been accepted. The selection of firms is naturally an invidious work, and it has sometimes happened that the lowest tenders have not come from firms judged by the responsible officers best fitted to execute the work. It is obvious that, in regard to some of the most important classes of Admiralty work, there are but few firms available. Particular instructions are issued to the Director of Contracts concerning the purchase of goods by public tender, direct negotiation, and the employment of brokers; and careful directions have been given as to the practice to be observed in opening tenders, this being a matter to which the Admiralty Board attaches great importance.

In the case of tenders for special articles, or for such as he desires information or advice upon, or in relation to which the head of a Department has expressed a wish to be consulted, the Director of Contracts is instructed to obtain the opinion of the head of the Department, before submitting the tender, with his recommendations, to the Superintending Lord concerned, and to the Financial Secretary, with whom the decision as to acceptance or non-

acceptance rests. In case of extreme urgency, the Director of Contracts is authorized, on his own responsibility, to accept the lowest tender, and to decide upon any offers respecting which he considers immediate action to be required; and he may order goods of the same description at the rates of a previous purchase made during the same financial year. Arrangements exist to secure full collaboration between the Director of Navy Contracts and the heads of departments in the matter of contract business. The examination of stores, as I have shown in previous chapters, rests with these latter, who communicate directly with the contractors in relation to supply; but, in the final resort, in the case of harmful delay after repeated applications, and of complaints as to the quality of stores delivered or in use, the business passes, after protest or examination, through the hands of the Director of Navy Contracts.

The varied nature of the business conducted by this officer renders it necessary for him to make himself acquainted with the changing conditions of commerce, and with improvements and alterations in regard to the designs and qualities of stores, and he is directed to visit establishments and sources of supply as often as possible, and to be in frequent communication with the users of stores. The heads of departments report to him their satisfaction or otherwise as to the manner in which contracts are being executed, so as to furnish ground for decision as to whether firms shall be maintained on or be removed from the Admiralty list.

It is not necessary to enter into a multitude of details touching the special methods of conducting contract and purchase business for the Navy, such as the practice of arbitration attaching to contracts for manufactured articles or stores, the buying of stores locally abroad at a cheaper rate or greater advantage than by shipment from home, the course taken to avoid the accumulation of excessive stocks, and other such matters.

In addition to being a purchasing officer, the Director of Navy Contracts is instructed to sell old ships and naval stores of all kinds. His business is to obtain the best price, and to sell under the best conditions, and he furnishes particulars of his operations in this matter to the departments concerned, the account of sale itself going to the Accountant-General upon the question of finance. Generally speaking, in this work, as in that of purchase, the procedure is based upon the principle adopted under the reforms of 1869-70, many improvements in business methods having been introduced from time to time.

Mr. Forwood's Committee of 1886-87 entered at great length into the question of contracts for ships and propelling machinery, which, as I have said, is a matter lying outside the Contract and Purchase Department. I shall not, therefore, enter at any length into the question in this place, reserving some remarks upon the relations existing between the Admiralty and contractors until the concluding part of the volume. The chief reason why the Committee proposed to transfer the contract business concerning ships and propelling machinery to the Director of Navy Contracts, was that it was considered "*desirable in the public interest that those who design and have to see the work carried out, should be distinct from those who negotiate and conclude the contract.*" It had been given in evidence before them that in many instances of contracts concluded prior to 1886, the lowest tenders, among selected firms, were not accepted, and that designs were adopted quite at variance with the specifications sent out. Tenders, for example, had been asked for ordinary compound engines, and contracts had been made for those of triple expansion. They alluded as "illustrative of the unsatisfactory effect of the system" to the contracts for the *Renown* and *Sans Pareil*, and for the engines of the *Nile* and *Trafalgar*. They referred also to the discrepancy that existed in some cases between the terms arranged with contractors for engines

and the conditions eventually embodied in the contracts in regard to penalties and to payments for extra indicated horse-power. The matter, however, is one more of administrative wisdom than of administrative machinery, though I may observe that the methods of contract and purchase are not under the most rigid system of control.

CHAPTER IX.

THE DIRECTOR OF NAVAL INTELLIGENCE.—THE HYDROGRAPHER OF THE NAVY.—THE DIRECTOR OF TRANSPORTS.—THE DIRECTOR OF ARCHITECTURAL AND ENGINEERING WORKS.—THE DIRECTOR OF GREENWICH HOSPITAL.

My survey of the Admiralty "machinery" now brings me to certain Departments largely concerned with the practical work of the Navy—to Departments which are of much importance in themselves, but which, nevertheless, do not call for treatment at great length in this volume. The first of these Departments is that of *Naval Intelligence*, a recent addition to our naval machinery, which yet has come to be recognized as of such surpassing utility that it seems, at first, difficult to understand how we prospered so long without it. But the truth is, that the appointment of the Director of Naval Intelligence was enforced by a quickened consciousness of the vast increase in the scope and of the far larger incidence of naval affairs. The Director is an advisory and not an administrative officer. It is his work to amass the information which is necessary to enable the Lords of the Admiralty to form their judgment as to the sufficiency and employment of the fleet. The work of naval intelligence has, therefore, necessarily always gone on within the Admiralty, but the institution of a special Intelligence Department in 1887 has been found, under the new administrative conditions, of signal value. Some writers, indeed, regarding the Department as a new factor in Admiralty

procedure, have gone so far as to describe it as a potential "Brain of the Navy," capable of assuming a high directive function; but the truth is that the First Sea Lord, who is the Superintending Lord of the Department, even if relieved of some of his many duties—and some slight relief was afforded subsequent to the report of the Hartington Commission—must always, assisted by his colleagues, bear the grave weight of his supremely important advisory duties. An insuperable difficulty has, indeed, been found in removing from his shoulders even any part of the administrative work which gives him the full grasp of conditions and affairs essential for his consultative function in regard to the more important part of the naval business of the country. It was the opinion of the naval officers who gave evidence before the Hartington Commission that the consultative function of the First Sea Lord could scarcely be divorced from any of his administrative duties.

The Naval Intelligence Department includes two branches, one of Foreign Intelligence, and the other of Mobilization, the latter charged more especially with the grave duty of preparing plans for the organization of our vast and varied resources in view of hostile operations, and also, upon receiving instructions from the Board, for the carrying on of war with different Powers. The Department, as I have said, is purely consultative, and in no sense administrative. The essence of its work is officially described as "preparation for war," that is to say that every information necessary for the carrying on of war is to be collected by it, and, through its operations, is to be made rapidly accessible both to the Board and the fleet. The Director of Naval Intelligence is accordingly charged to furnish to each Naval Lord all necessary information concerning that Lord's work or duties which the operations of the Intelligence Department make available.

The chief objects to be kept in view by the Director of

Naval Intelligence are the gaining of an accurate knowledge of the naval resources of foreign nations, their preparedness for war, and their ability to carry on maritime war; the collecting of all information in a complete and readily accessible form; and the keeping commanders-in-chief and other officers in command supplied with such important information as the Board may consider necessary. To this end the Director of Naval Intelligence has particular instructions. He is to collect, sift, and lay before the Board all information on maritime matters likely to be of use in war; he is to keep ready a complete plan for mobilizing the naval forces of the Empire, and, when directed, is to prepare plans for naval operations for the consideration of the Board; and he is to bring to the notice of the Board all points touching "preparation for war." There is, however, an express injunction that the Intelligence Department is not to indicate to the Board any policy unless called upon to do so. Information is always to be immediately available concerning the distribution and condition of foreign warships in commission and reserve, the distribution of fast merchant vessels, both British and foreign, the resources in regard to reserve personnel of foreign Powers, and the state of their coast defences, the condition of our coaling stations, the state of our ships of war in regard to readiness for mobilization, and the number of officers and men available.

In short, the Department of Naval Intelligence is the repository of all information necessary for the conduct of naval operations, and of knowledge indispensable as a basis for adequate "preparation for war." Hence, in regard to naval policy and the framing of shipbuilding programmes, the Director of the Department is an officer often consulted; and he prepares alternative schemes for the manœuvres. Periodically he lays before the naval members of the Board reports upon the work he is conducting and proposes to conduct, and he draws attention to deficiencies in personnel and

material which may affect promptness of mobilization. His Department, therefore, deals with matters vitally important in regard to the effective value and employment of the fleet.

Another important officer of the Admiralty, supervised by the First Sea Lord, is the *Hydrographer of the Navy*, whose office dates from the year 1796. The King's Hydrographer, however, was an officer of importance in the days of the Stuarts, and at the present time the Hydrographer at the Admiralty carries on work of the very highest value to the naval service. He is the scientific adviser of the Board on surveying matters, and has charge of the scientific work which the Board delegates to him. He submits such surveys as he considers necessary to be made, and is responsible for the accurate execution of them. He watches the progress of foreign nations in hydrographic matters, and is the adviser of the Board on all questions connected with practical navigation, pilotage, and other subjects of a like professional or technical character. It is his work to obtain and publish information respecting navigation, and to prepare for publication charts and nautical directions, as well as tide tables and light lists for all parts of the world; and he supplies charts, chronometers, compasses, and scientific instruments to ships. Again, he advises the Board in relation to the conservancy of the royal harbours, and pilotage, and the appointment of surveying officers, and controls the scientific vote of the Navy estimates in regard to the contingencies of observatories, and the cost of preparing surveys, charts, chronometers, etc. He has charge, also, of questions connected with the Royal Observatories at Greenwich and the Cape of Good Hope, as well as with the Nautical Almanac. The operations he conducts are of the greatest utility to the merchant service.

The *Director of Transports* carries on the work of the Transport Board, which was instituted in 1689, during

the struggle in Ireland, and re-constituted in the following year. The Transport Commissioners were reduced in 1717, and abolished in 1724, but many abuses afterwards prevailed, and the Commission was revived in 1794. The Transport Board afterwards took up the work of the Commissioners of Sick and Wounded, and, in 1806, the business of the Sick and Hurt Office was transferred to it; but this arrangement was done away with in 1817, when the Commission was abolished, and its powers transferred to the Commissioners of the Navy and of Victualling. The Comptroller of Victualling and Transport Services was one of the officers who, under the reforms introduced by Sir James Graham, carried on the work of the dissolved Navy and Victualling Boards. In the year 1862 the Victualling duties were separated from the office, and the Transport duties were placed under the Director of Transports.

Generally speaking, the Director of this Department is responsible, under the Board, for providing conveyance for troops and seamen, Navy and Army stores, and all persons of the Navy and Army departments proceeding on Government service, and he prepares the estimates for this service, and examines all claims before payment. He is charged with the control of the executive and financial duties connected with the conveyance of troops to and from India on behalf of the Secretary of State for India, and he keeps and renders accounts of all receipts and expenditure connected therewith. The charges on this head do not appear in the Navy Estimates, although the expense of the establishment for carrying out the duties does, being included in the transport establishment. An important change was made in the year 1869, when all the account work, which formerly the Director of Transports transacted for his own Department, was transferred to the Accountant-General of the Navy, whereby the office of Director of Transports became practically an executive office only. I have already

gone, at considerable length, in preceding chapters, into the question of store accounts, and therefore need not enter into the matter here. In 1886, as was the case with all the Store Departments, the account work was given back to the Director of Transports, and it was certainly very much better that those who knew something about Transport stores should carry on the duties. An Assistant Director of Transports was appointed in 1880, when the Indian troop service was formed into a separate branch.

It will be well understood that in war time the work of the Transport Department must become of the very highest importance, and there can be no doubt that, as at present constituted, that Department would be put under very considerable strain. At the commencement of the Egyptian War the officers of the Department were working until twelve o'clock at night, temporary copyists were brought in, and people borrowed to help in the work. Mr. Baughan, Assistant Director of Transports, told the Royal Commissioners on Civil Establishments, in 1887, that, in the case of a great war, such pressure could not be borne for any length of time. I refer to this matter in order to indicate the very weighty business in the duty of preparation for war which rests in the hands of the Admiralty Board. The Director of Transports is supervised by the Junior Sea Lord.

The last of the greater Civil Departments of the Admiralty of which I have to treat is that of the *Director of Architectural and Engineering Works*. It is a Department of very high importance, charged with the outlay of vast sums of money, when it is deemed necessary to construct docks, fortifications, or other works on shore; and operations of repair and reconstruction are, of course, always going on. The Director of Works has charge of the architectural and engineering works of the service ashore, and of Admiralty property and establishments, in-

cluding Coastguard buildings, both at home and abroad, except in London. He advises the Board concerning all new works, and the alteration and repair of existing buildings, and is responsible for the proper design and execution of any works decided upon, and for the purchase of the necessary materials. In this respect, his department is excepted from the rule which brings the duty of purchase into the hands of the Director of Navy Contracts. As in the case of contract-built ships, it is thought well that the Director of Works should be the purchaser of his own materials, and, considering that he is the officer who understands the work in hand, and is responsible for the proper execution of it, this disposition seems wise. In addition to the purchase of stores, the Director of Works is the adviser of the Board on all questions relating to the purchase and disposal of property. He prepares the estimates and rules the expenditure for the work to be carried out by his Department (Vote 10), except as regards the salaries and allowances of the officers superintending works in progress, which are furnished by the Accountant General; and the vote as a whole is referred for the concurrence of the Controller of the Navy.

The duties that devolve upon the Director of Works are very varied in character. It may fall to him to take charge of the repairs to a Coastguard station on the coast of Ireland, the extension of a mole, or the formation of a dock, at Malta or Gibraltar, the erection of a store-house at Bermuda, or the building of a breakwater at Jamaica or Singapore. If a dock is to be constructed, the Controller of the Navy, being responsible for the ships built and proposed, is asked to say what is the largest vessel that the dock should be fitted to receive. This information being supplied, the Director of Works makes a sketch of the dock, designed to accommodate the ship indicated, with the further assumption that the ship has been struck or waterlogged, and has an added draught of water. The

Controller will probably make suggestions in regard to the design; and, the general character of the dock being agreed upon, and every officer whose opinion upon the matter is desirable having been consulted, the rough plans are finished. These are sent out to the station abroad where the dock is to be constructed, and the officers there who are to use it, examine the details of them, as for instance of the timber-slides and steps; and, when the report they make reaches the Admiralty, it is again submitted to the Controller, and the finished designs are completed.

All work of importance is conducted by means of contract, the contractors being taken from a selected list, and being generally invited privately, and not by public advertisement. Very great importance is attached to the matter of tenders, and to the manner in which these are dealt with, and many precautions have been instituted to prevent abuse. In regard to minor repairs, as, for example, at Coastguard stations, tenders are procured from builders in the neighbourhood, and the lowest tender is generally accepted, unless evidence of collusion should have been discovered. In regard to new Coastguard stations, however, public advertisement is resorted to.

Mr. Forwood's committee, in 1887, recommended that so far as was possible, the purchases and contracts in the Department of the Director of Works, like those for the hulls and machinery of ships, should be placed under the Director of Navy Contracts, to be carried out on the general basis of the purchase scheme approved in July, 1883. This, however, was not done, and it is now generally admitted, that it is best the purchase of stores of the required nature should rest, under proper check, with the officer who is best acquainted with them, and under whose authority they are used.

It remains now, of the smaller Civil Departments of the Admiralty, to refer only to the *Director of Greenwich Hospital.* Much that is very interesting might be written

about the history of this establishment, and I would gladly have entered at length into an account of it, but its work can occupy but a small space in a volume upon naval administration. It is, nevertheless, a very important duty that is carried on. The Director deals with all matters relating to the administration of the Hospital estates, revenues, and school, submitting such questions to the Civil Lord or Council as may be necessary. He reports and advises as to the property in the North, in Greenwich, and in the Isle of Dogs, which he visits when necessary. With him, too, rests the inspection of the collections of works of art, relics, plate, etc., in the Painted Hall and elsewhere at Greenwich Hospital, and he reports to the Board upon any matter that may seem to him to need attention. Lastly, he deals with the applications of widows of seamen and marines, and others, slain, or drowned in the service of the Crown, for pensions out of Greenwich Hospital funds, as well as with the question of allowances for their children, and with claims for gratuities to parents and other relatives of seamen and marines, consulting with the Civil Branch of the Secretary's Department when necessary in relation to this matter.

The building at Greenwich consists of four blocks, from designs by Sir Christopher Wren, named respectively after Charles II., Anne, William III., and Mary. It was the last-named queen who conceived the idea of converting Greenwich into a refuge for aged and disabled seamen, but the real origin goes back to the institution of the Chatham "Chest" by Drake and Hawkins. In 1716 the forfeited estates of Lord Derwentwater were added to the foundation. Greenwich was abolished as a hospital in 1869, and became an educational establishment for the Navy, with beneficial results, in 1872.

JAMES II., LORD HIGH ADMIRAL.

AFTER G. KNELLER.

Part III.

THE WORKING OF THE ADMIRALTY MACHINE.

CHAPTER I.

GENERAL CONSIDERATIONS AND OFFICIAL PROCEDURE.

I have now reached what is in some respects the most difficult part of my task. It is to show, as far as is possible, the working of the Admiralty "machine" which I have described. I have not entered into questions of administrative wisdom, nor the sound or ill policy of successive Admiralty administrations. There has been laid before the reader an account of Departments carefully organized to conduct a business of great complexity and of far-reaching importance to the country. In the work of these Departments errors have undoubtedly from time to time been made, but, on the whole, it must be admitted that they have acquitted themselves well, and have enabled the Admiralty Board to provide us with the greatest, and, as I believe, the cheapest Navy in the world. Our ships are the patterns which many foreign nations have copied; they are admirable both in character of design and in excellence of work, and they are constructed with a rapidity that is the wonder and envy of our rivals. In the operations of the Admiralty system, in the working of its "machinery," much must necessarily depend upon in-

dividuals. It is so in all administrative institutions. But just as a good tree will produce good fruit, it is the characteristic of a good system to produce good men, to allow them to rise, and to hold positions which their abilities best fit them to fill. For many years back we have had high-minded, capable, and far-seeing men at the head of our naval administration. There has been loyal service and fruitful endeavour, and the Admiralty system has produced the best results.

I do not say that the organization is perfect. On the contrary, from time to time, a number of defects, which are, indeed, incidental rather than radical, have been disclosed; but, at the same time, working together for a common object, the Departments have achieved results of which the country may be proud. Much is certainly due to the reforms instituted under the administration of Sir James Graham, by which the obstructive minor Boards, theoretically dependent on the Admiralty, but practically all but independent, were done away with. A better system has grown up, and the Civil administrative Departments of the Admiralty fully recognize the fact that they are constituted for the benefit, and to facilitate the equipment, of the service afloat. To this feeling, added to the zeal, energy and intelligence of the active service, we owe the present high standard attained.

It has already been suggested that there are some defects in the organization, and, I may add, in the conditions under which it is placed. It might be said, for example, in regard to the latter, that the responsibility for the design of naval guns is not easy to determine. The Ordnance Committee, an inter-departmental body, composed of naval and military officers, is "controlled by the Director of Artillery" at the War Office, and is held responsible by the Commander-in-Chief for the designs of ordnance. Yet naval ordnance is surely a business rightly belonging to the Admiralty, and for such work the First Lord is

responsible, his authority being delegated through the Board to the Civil Departments. Ours is the only important Navy that has not the entire management of its ordnance. Again, it was shown in Chapter II. of the Second Part, that the Director of Naval Construction is responsible for the construction as well as for the design of warships, and the manner in which his responsibility for construction is construed was indicated. But, when we remember that the Director of Dockyards is also responsible to the Controller for the building of ships and boats, the thought will naturally arise that a possible cause of friction exists, latent, but presenting a possibility of harmful influence. The system of selected firms for contracts is not without danger. There has been discrimination in former years between the tenders made, on the ground of real or supposed differences between the relative reputation or ability for the work of the firms tendering, although presumably these have only been invited to tender, and been put to the cost of preparing their designs and estimates, after the Admiralty have satisfied themselves of their capability for the work. Elements of uncertainty have thus at times been introduced into Navy contracts, and friction has arisen. The door to favouritism has been laid open, and it rests largely with high-minded officers that all works well. The country may be congratulated that the Admiralty system, often in former times abused, has, under reforms introduced from time to time, grown stronger, and produced officers devoted wholly to the public service. The system itself can, indeed, scarcely be held responsible for the existence of such conditions as I have described. They are conditions that arise almost necessarily from the nature of the business to be done.

To some extent, the reader will already have seen what are the special features and merits of Admiralty administration. It will have been noticed that the dominant characteristic is flexibility or elasticity of working.

As I explained, there is no real separation of the duties of the Lords of the Admiralty. They are not heads of departments rigidly defined, and the operations they superintend are closely inter-related. Those who have written in disparagement of the Admiralty Board seem to me to have failed to understand what are its distinguishing merits. Yet the Royal Commission on Civil Establishments in 1887 reported that the constitution of the Board of Admiralty appeared to be well designed, and to be placed on a satisfactory footing. The advantage of the frequent personal contact of the First Lord with his chief advisers was pointed out, and it was urged by the Commissioners that such personal communication should be encouraged as far as possible throughout all departments, the advantages of it having boen demonstrated. "It tends," says the report, "to a proper understanding between the head and its subordinates. It fosters personal responsibility, and it leads to the simplification of work, and the reduction of unnecessary correspondence." The Hartington Commission took generally a similar view.

This remark of the Royal Commissioners of 1887 points to a large advantage which is possessed by the Board of Admiralty. Matters which come before it are discussed between the members of the Board, and although the several Lords no longer reside, as in former times, at or near the Admiralty itself—a condition which might again become necessary in war time—the principle of personal intercommunication is consistently maintained. I shall not be wrong if I say at this point, that this very feature of the Admiralty Board, combined with the anomaly which exists in the disparity between the Patent and the Orders in Council under which it is administered, is at the root of a great deal of the criticism which has been directed at the Admiralty.

I believe that another great advantage arising from the Admiralty system is often overlooked. Though far from

saying that the Board is always so closely in touch with feeling in the service as is desirable, I maintain that the happy blending of administrative and consultative duties tends greatly to foster the necessary inter-relation. In connection with this matter Mr. (now Sir Henry) Campbell-Bannerman, in his addendum to the "Further Report" of the Hartington Commission on the internal administration of the War Office, spoke words pregnant with truth. "At the Board of Admiralty," he said, "which I regard as being, in this respect, a model to be copied, the First Naval Lord is not divorced from executive duty. On the contrary, his duties keep him in constant contact with all branches of the naval service, and if he enjoys a certain primacy among naval members of the Board, it is quite as much on account of the importance of his executive responsibility as because of any particular function he fulfils as special adviser of the First Lord."

I have adverted, in a previous chapter, to the extreme elasticity which is possible under the Admiralty system, and before I go any further, it may be well to recount an incident which I very vividly remember. I was dining with the Lords of the Admiralty on board the Admiralty yacht at one of our ports, when, during dinner, an unusual incident occurred, of considerable importance, which seemed to call for immediate action. The First Sea Lord, recognizing the situation, after consultation with the First Lord, called upon the Secretary, and the three, retiring to an inner cabin, formed a Board on the spot; and, coming to an immediate decision, directed the Secretary to address an instruction upon the matter. The very fact that weighty business may be conducted upon such a flexible system renders that system all the more difficult to describe. Before the changes introduced by Mr. Childers, unimportant business was dismissed by the several Lords through the Secretary. All important business, however, was brought before the Board itself; the documents relating

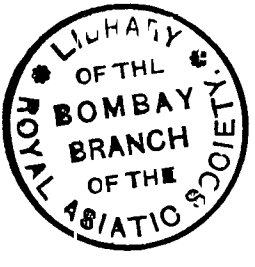
to it were read, the opinions of the members were taken down, and a decision being arrived at, the Board stamp was affixed, and thereafter a letter went out in the name of the Lords Commissioners of the Admiralty, signed by the Secretary. The Board, in short, was then a deciding and determining body. I have already shown that with the changes of Mr. Childers the importance of the Board meeting declined, and some went even so far as to think that it had lost its value. The system which then came into force was that papers were brought before the several Lords whose departments were specially concerned. The Lords then made their separate minutes and communicated with one another and with the First Lord, and, when a decision had been practically arrived at, it was, in the vast majority of cases, acted upon at once, and was afterwards ratified with the Board stamp.

Since that time the meetings of the Board have assumed greater importance. A large proportion of the business of the Admiralty is, it is true, conducted outside the Board, but the periodical meetings for discussion and the expression of opinion have a high value, and a very necessary function. The work conducted is both administrative and consultative. In regard to the administrative duties, each Lord, as we have seen, has a certain portion allotted to him, and for the efficient performance of those duties he is held responsible, so long as his views are not vetoed by the First Lord. His responsibility, however, would necessarily end, if—as has happened—decisions were come to on subjects affecting his Department without pains being taken to inform him thereof. In consultative duties, all questions brought before the Board are thoroughly considered and threshed out, but the First Lord has necessarily the final decision, his responsibility being that of a Cabinet Minister. The Board meetings are usually held once a week, and the most important matters brought up for consideration and decision are the Navy Estimates, designs for new ships, or

any alterations in those which have already been designed, changes in general regulations, dismissals or discharges of Naval officers, and other matters connected with discipline, the Orders in Council, all general orders, circulars, and other principal orders of a legislative character, with any other consultative business that may be brought forward by the direction of the First Lord. No paper is laid before the Board except with the First Lord's approval, and a schedule is prepared beforehand of the matters to be brought up at the Board for the information of the members. Shipbuilding boards are specially called together by the First Lord; and the Assistant-Controller and Director of Naval Construction, the Director of Naval Ordnance, and the Engineer-in-Chief attend as required. Decisions arrived at by the Board, with the more important minutes of the several Lords, are printed daily in a compact form, which is sent to the members and the heads of Departments, and the papers themselves are marked, after the execution of the minutes, to any other Department which may be affected by the decision given.

Correspondence received at the Admiralty, after being registered, is marked for the Lords or Departments to which it is properly referred. As a general rule the papers are marked to the members of the Board in order of seniority, beginning with the junior. They are passed through all necessary channels, sent up with such illustrative precedents or references as are necessary, and, being minuted by the several Lords through whose hands they pass, and a decision being arrived at, either by the responsible Lord or by the Board itself, they are placed, after action has been taken upon them, in the Record Office of the Admiralty. No better system of record and reference could exist than that which prevails at the Admiralty. The papers are arranged in the most convenient form, docketed with cross references, and are made accessible, either as single papers, or as whole series referring to a particular

subject, by voluminous minute books, kept upon a most admirable system. Through the machinery of the Record Office, any information lying in the huge bulk of the Admiralty papers is almost immediately accessible; and how great is that bulk will be seen when I say that documents covering a period of forty years, which were recently transferred to the Public Record Office, weighed something like one hundred and fifty tons.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THE ADMIRALTY OFFICE AT WHITEHALL. *Circa* 1790.

(From a Water-colour in the Pennant Collection, British Museum.)

CHAPTER II.

THE NAVY ESTIMATES AND THE SHIPBUILDING PROGRAMME.

THE foregoing general explanation of the methods of Admiralty business—of Board meetings, the personal intercommunication between the several Lords, the transmission of papers, and the record of affairs transacted, with other like matters, will, I hope, be useful and interesting. There is, however, much else of importance which I have set before myself to explain. I propose now to show, as far as is possible, within the space at my disposal, how the Admiralty Board conducts that great business which is committed to its charge. I cannot do better than say here what I said in the first chapter of this volume, that our naval administration exists for the constitution, maintenance, and disposition of the fleet in its material and personal elements, that it is the organizing force which, under the Cabinet, shapes and directs our maritime policy for safeguarding the interests of the Empire. I may here allude incidentally to a fact of which I think few are aware. It is that, of all the great departments of State with which the Admiralty is brought into communication, it usually—save in the event of combined naval and military operations—has least concern with the War Office. Outside the sphere of purely naval occupations I estimate the proportion of work done by the Navy for other Departments as follows: the Foreign Office, one half, and the Colonial Office, one quarter; the remaining quarter being divided in the proportion of one-tenth each to the India

Office and the Board of Trade, one-twentieth only of the whole falling to the War Office.

I have dealt so extensively with the question of responsibility that I shall advert to it only incidentally here. The First Lord is, and must be, responsible for the Admiralty business and the conduct of our naval affairs, as a Cabinet Minister at the head of the naval administration. It was stated in the report of the Hartington Commission that the constitution of the Department possesses more the character of a Council with its supreme and responsible head than of an Administrative Board. "The Minister is the sole person who should be held responsible by Parliament and the public, and the responsibility of the members of his Council, both for administration and advice, should be directed to him. On the First Lord alone should rest the responsibility of deciding on the provision to be made for the naval requirements of the Empire, and the existence of a Council should be held in no degree to diminish that responsibility."

The consideration of these naval requirements is, in fact, the corner-stone of the whole matter. Upon it the Navy Estimates are based; without it those Estimates would be meaningless. But this consideration involves another. Our fleet is not a new creation inspired by the needs of a single year. It has expanded under expanding conditions. Hence the Navy Estimates must be largely based upon those of previous years. They are, in fact, those Estimates modified by the new conditions which have arisen.

But there is another modifying circumstance, in a certain sense of larger significance. It is not necessary to disguise the fact that the first step that is taken in preparing the Navy Estimates is to place them upon a financial basis. This, said the Commission of 1888, is the first step which governs the whole proceeding, namely, the amount of money to be spent. Under a constitutional

system of government such as our own, this condition cannot but exist. The ultimate responsibility rests with the Cabinet. The policy of the Government, its relations with other countries, the character of its interests, and any new duties or responsibilities it may assume, together with the ability of the taxpayers to furnish sufficiently large supplies, are all matters that enter largely into preliminary discussion upon the Navy Estimates. It is for the Government, having heard the counsel of its naval advisers, to bear the responsibility for the sufficiency of national defence. "The estimates and the strength of the Navy," said Rear-Admiral Hotham before the Select Committee, "are matters for the Cabinet to determine." "Expense," said Sir Anthony Hoskins, "governs everything." This last was, of course, an axiom of practical expediency.

Now, apart from the expansion of empire, which should necessarily impress upon the Cabinet the need of larger defensive means, the chief condition modifying the Navy Estimates is the naval progress of foreign countries. It has been tacitly accepted as a basis—I need not here stop to inquire whether a fully sufficient one—for the increase of our fleet, that it shall be equal in strength to that of the two Powers next strongest. As Sir Anthony Hoskins said, before the Select Committee on the Navy Estimates, 1888, so many considerations enter into the calculation of our naval sufficiency with reference to the nations with which we may be at war, the means they may develop, and the form our warfare may take, that it is not possible to lay down any very definite rule. But whether this ratio, or any other, be accepted, it must always rule our shipbuilding programme, and with it nearly every vote in the Estimates. It is here that the Naval Intelligence Department comes into play, the accurate information it has amassed being at the disposal of the First Lord and the Board as a needful factor in the estimation of our naval requirements.

It is certainly within the province of the First Sea Lord to initiate suggestions to the First Lord as to the shipbuilding programme of the coming year. Sir Arthur Hood (Lord Hood of Avalon) has stated that when he was First Sea Lord, he considered it his duty to consult with the Controller on the subject of the shipbuilding programme, and that it was their work in conjunction to put forward proposals which would meet the requirements of the coming twelvemonths. That scheme, he said, would go before the Board, and would be thoroughly considered, and the Board would either approve or disapprove, as it judged best. But Admiral Hood did not disguise the fact that financial considerations must weigh largely. "We know from years past what sums can be allowed, and it is no use our recommending to build a large number of vessels which we know cannot be allotted by the Government and by Parliament, and we take the whole question into consideration on this basis." If any of the naval members of the Board should be discontented with the extent of the shipbuilding programme which they are allowed to put in hand, there remains to them the remedy of protest or resignation. The resignation of the naval members of the Admiralty Board would be a serious blow to any government, and the possibility of such an occurrence has sometimes operated favourably for the naval interests of the country. But, in practice, an individual member of the Board may not always feel justified in resignation. He may think it better for the interests of the country to carry on his work unbroken, than to emphasize his protest by a resignation which would not in any degree advance his views. In a general way, therefore, I may say, in the language of Admiral Hood, that the First Sea Lord and his colleagues endeavour to meet the requirements of the Service in the best way with the money which they know will be allowed by the Government. The Board, in short, works for the

interests of the country, and it must necessarily work with the tools which are placed in its hands; but it is, of course, known, from the spasmodic manner in which our shipbuilding progress has been made, that the financial policy of the government has not always permitted steady advance in naval affairs. At the same time, it was in evidence before the Select Committee of 1888, that no complete scheme, showing what were the naval requirements of the country, had been laid before the Board, apart from the financial limits laid down by the Cabinet, at any time within the knowledge of those most conversant with Admiralty affairs.

Here, of course, in regard to responsibility, a very large question might be opened up. The Board may be guided by what it believes to be the naval needs of the Empire, or it may be guided by considerations that are purely financial. There is an antithesis between the two conditions, and it must rest within the discretion of the several members of the Board how far they will be guided by two things that are in their essentials totally different. Nor is it easy to see what responsibility could rest upon the Board if disaster occurred through the want of ships which had been denied to the Admiralty by the financial policy of the Government. But I must say again that the final responsibility rests largely with the First Lord. Like the members of the Board, he too, as a member of the Cabinet, has the remedy of resignation if overruled by his colleagues in what he believes the vital interest of the country; but, like them again, he may consider it wiser to do the best that is permitted to him, than to endanger the Cabinet of which he is a member. Lord George Hamilton, First Lord in 1888, told the Select Committee on the Navy Estimates that, if it were represented to him by his colleagues that a certain expenditure was indispensable for the efficiency of the Service, he would recognize that all financial considerations should be put on one side.

"This," said the Commissioners, "is, in fact, the common-sense view of the matter, and it is difficult to see on what other footing the control of the Navy expenditure, consistently with responsibility to Parliament, could be placed. But your Committee are of opinion that the responsibility of the Board of Admiralty and the Government respectively would be more clearly defined and accentuated if the wants of the country were carefully considered, and a programme drawn up and submitted by the First Lord on behalf of the Board to the Cabinet, before any decision is taken as to the amount of money to be spent during the year."

I cannot do better than cite, as a general illustration of the methods of procedure in regard to the Navy Estimates, the account given by Lord George Hamilton of the course taken in regard to the Estimates and shipbuilding programme of 1888. I do so because it is an excellent illustration of the manner in which the Navy Estimates are prepared, and because it was given by a First Lord who took a very large part in the constitution of the fleet which we now possess. He said that in June, 1887, the Director of Dockyards made a report to the Controller, showing the amount of labour which would be required during the forthcoming year to complete the work in hand, relating to ships ordered to be built, or under repair. The expenditure of the previous year was the basis of his consideration, and the calculation of the amount of labour which would be absorbed by existing work, enabled the Director of Dockyards to estimate the margin that would be available for new shipbuilding operations. Another report to the Controller was furnished by the Director of Naval Construction, dealing both with the expenditure in the dockyards and upon contract-built ships; and that report was also made upon a financial basis. We read that the Director of Naval Construction presented on this occasion a list of the ships he proposed

to lay down, with a further list of the constructions he projected for the next four years. The First Lord, having weighed these reports, discussed them with the Controller and the First Sea Lord, and asked them to draw out a programme which, in their judgment, was best adapted to the wants of the Navy, for he was not certain that either would acquiesce in the recommendations of the Director of Naval Construction. Sir Arthur Hood has said that the discussion between the First Sea Lord and the Controller is the most important step in the whole matter.

These officers considered the question put to them, and proposed an alternative programme, which was laid before the Board, accompanied by illustrative documents. All the papers relating to the proposals of the Director of Naval Construction were circulated among the individual members of the Board, and the alternative proposals put forward also went before the Board, so that every member had the best opportunity of being acquainted with the whole question in all its aspects, even before the Board met to discuss it, and several meetings took place before a final decision was arrived at. "It is absolutely necessary," said the First Lord, "to fix the shipbuilding programme on a financial basis, if proper arrangements are to be made for the employment and distribution of the labour in the dockyards, and the purchase of stores in time. By no other process could the officers who have to purchase these stores receive information in time, so as to enable them to get the full value of competition in the open market." At the same time, Lord George Hamilton told the Committee that the decision of the Government as to the amount of money to be provided in the Estimates had been taken before the shipbuilding programme was prepared, though he did not regard that decision as irrevocable. The meaning of placing the Estimates upon a financial basis is that the officers are directed to prepare

them on the expenditure of the preceding year. The Select Committee, which heard this and much other evidence on the question, was content with the procedure in this matter. It expressed the opinion that the decision upon this most important question, according to the financial basis originally laid down, had been arrived at with the fullest knowledge, with great care and deliberation, and in such a way as to bring to bear upon it the experience and capacity of all the members of the Board who were concerned. The formulation of shipbuilding programmes, in relation alike to the replacing of ships that become obsolete, and to the provision of continuous work in the dockyards, does not, of course, depend upon the necessities merely of the forthcoming year. It looks further into the future, and takes account of years yet to come. The Naval Defence Act of 1889 did much to conduce to a continuous naval policy, and the programme afterwards adopted by Lord Spencer, though its full details were not announced, had reference to an extended period.

I have now made clear the methods of Admiralty administration in regard to the formulation of the Navy Estimates and the shipbuilding programme. We may see how the Naval Lords, co-operating with the Civil Departments under their superintendence—the Director of Naval Construction, the Engineer-in-Chief, the Director of Naval Ordnance, the Directors of Dockyards, Victualling, and Stores, and, I may add, the Director of Naval Intelligence—deal with the larger aspects of the colossal business in their charge.

Another very important and related matter which comes before the Board is the selection of types and classes of vessels. Generally speaking, the idea of the ship to be constructed will be thrown out by the naval members of the Board, and the Controller will direct the Chief Constructor to prepare the designs. When these have been prepared, the Controller and the First Sea Lord will

express their views upon them, as to whether they fulfil the requirements of protection, armament, coal-endurance, and general fighting efficiency. The design, so far, is in the nature of a sketch, and as such, with the remarks of the two Lords indicated, it goes before the Board, accompanied by a full consideration and explanation of the details. The Board will then generally criticise the design upon various points, and, if it should be approved in its general character, it will be dealt with by the Director of Naval Construction, and will again go before the naval members of the Board, all the facts being circulated among the members, and not until the whole Board approve of the design can that ship be built or ordered. And again, when the ship has been put in hand, no changes can be introduced into her, either by the designer or the constructors, without the express sanction of the Board. I have so thoroughly dealt in the last part of this book with the duties of the Director of Naval Construction, and of his associated officers of the Controller's Department, in relation to the work of shipbuilding and ship-designing, that I need not here enter into it further. Suffice it to say that the system is of a closely-jointed character, and that the chain of responsibility is maintained in regard to the character of all new ships.

Just as the Admiralty Board considers the shipbuilding programme and the types of vessels—and I may add, other vital matters in its charge, such as shore works, docks, fortifications, and the preparation of offensive and defensive plans of warfare in view of possible operations—so does it consider the wants of the Service in regard to the personnel. For ships building officers and men must be provided, and ships in commission must have companies, so that Vote A of the Navy Estimates, which is concerned with "Numbers," is very closely related to the shipbuilding programme, and to the distribution of the fleet

decided upon by the First Sea Lord. As I have explained, the work of manning is committed to the Second Sea Lord.

It is easy to see that Vote A will largely rule the preparation of other votes. Vote 1, for wages of officers, seamen, and boys, Coastguard and Royal Marines, is, in fact, based upon it. The Victualling and Clothing vote, too, depends very largely upon it. In preparing his estimate, the Director of Victualling takes into consideration the maintenance of the reserve stocks at the various victualling yards, calculated upon the vote for men, which is necessarily at the foundation of his estimate. He has to take into account the reserve stores, and the quantities that will be consumed. This matter I dealt with at some length in the chapter upon his Department. The sections of Vote 8, too, for shipbuilding, repairs, maintenance, etc., depend almost wholly upon the shipbuilding programme, and the refitting and reconstructive work going forward. The Director of Stores, for example, prepares his estimate on the information received from each yard as to the quantities in stock, the average expenditure in issues of past years, and the probable expenditure in the ensuing year, not only of principal articles, but of every individual article of all the numerous varieties in use. The professional officers of the Dockyards estimate the quantities necessary to meet requirements—having before them a preliminary outline of the work to be done during the ensuing year in repairs and in advancing or completing ships—and the number of men to be employed, having regard also to the average consumption in the previous year. I will not go any further into the details of this matter. The executive heads of the Civil Departments, having before them the general lines of the policy adopted by the Board, frame the several estimates of the votes which are committed to them, after a minute and careful consideration of all the conditions likely to affect the needs

of the year. In the appendix will be found a statement of the votes, and of the officers by whom they are prepared, which will make the matter sufficiently clear.

The Estimates having been prepared in the manner I have suggested, and in relation to the instructions of the Board, are discussed at Board meetings before being finally approved. Every member of the Board is furnished with the Estimates in due time, so that he may consider and confer in relation to them before the Board meets for discussion. The heads of Departments are then called upon to explain the votes with which they are concerned. The Accountant-General, who holds a considerable office in regard to the final shaping of the Estimates, as regards the financial basis of them, is instructed to be present at the Board meeting at which the votes receive final approval. It is provided that this arrangement shall not in any way interfere with the heads of Departments bringing before the Board any question that may arise in the preparation of the votes which the Departments control; but the Board requires the concurrence of the Accountant-General to each vote before it is approved. Necessarily, as a financial officer, the Accountant-General is concerned with the financial character of the Estimates, which, as we have seen, has an important relation. It does not, however, call for weighty deliberation on his part, his function being to give final shape to the votes which have been prepared. While I am referring to the Accountant-General, I will touch incidentally upon a special matter concerning the money voted. It is provided that, before any such money can be applied to any purpose other than that for which it was voted, that officer's consent is necessary. This does not seem to me a sufficient guarantee. It has happened before now, for example, that money voted for ammunition has been otherwise spent, and that ships considered desirable to be commissioned have been found destitute of special kinds

of ammunition. Here a danger suggests itself, but if the re-allocations of money voted were a Board matter there would be a stronger guarantee against its recurrence.

I have now explained, in a general manner, how the work of the Board is conducted, year by year, in view of the provision of money. The first step in the work of the Board is to procure from Parliament the "sinews of war," and, having obtained the necessary supplies, to see that they are expended well. It remains for me, therefore, in the next chapter, to show, in a general manner, how the money provided is laid out.

CHAPTER III.

THE SPENDING OF THE MONEY.

THE Civil, or executive and spending, Departments of the Admiralty are held responsible for the administration of the votes they compile. It is their duty to see that the money is well expended, and that the expenditure is in relation to the estimate that has been made. In the work of closely watching the outlay of money, the spending Departments are therefore largely occupied, and the work of reporting is continually going on. The Director of Stores, for example—and the remark applies to all store-keeping departments—is directed to keep himself acquainted with the expenditure of the money voted for the purchase of naval stores, in order to guard against any deficit on the vote, and to secure that, if the expenditure is likely to fall short of, or to exceed, the amount allowed, the Board shall have timely notice thereof; and the Accountant-General is to be kept informed of the matter. The Board has laid down express regulations to secure financial order and control as regards liabilities and expenditure.

In regard to this matter the Accountant-General is largely concerned. He is directed to assist the spending Departments in their duty of watching closely the progress of their liabilities and disbursements. To this end he furnishes them with all information that is necessary for securing an efficient control over the expenditure under their votes, and frequent reports at stated periods are made to them for this purpose.

It is not necessary for me to deal with the administration of certain of the naval votes. The whole of the vast business connected with the expending of money on the personnel of the Navy and the non-effective services, transacted in the Accountant-General's Department, calls for little comment. A special section of the Department, the Navy Pay Branch, is devoted to the work, and conducts the details of the business relating to the pay, wages, and salaries of the fleet and the establishments ashore. It is a duty of equal complexity and magnitude, but is conducted with the utmost ease, and with mechanical regularity and smoothness.

It is by the shipbuilding votes that the larger machinery of the Admiralty is set in motion. The executive Departments, as I have said, do not, save in regard to the hulls and machinery of ships built by contract, and the special requirements of the Director of Works, enter upon the purchase of stores. With the exceptions indicated, the whole of this work is carried out by the Director of Navy Contracts.

Within the Controller's Department are centred many of the more important spending branches. I showed, in an earlier chapter, how proposals for ships to be built, initiated in that Department or directed by the Board, are given effect to through the machinery at the Controller's disposal. I explained how the Director of Naval Construction, working in conference with the Engineer-in-Chief, and the Director of Naval Ordnance, as well as with the advice of the Assistant Director of Torpedoes, proceeds to his work. The reader has seen how sketch designs are prepared, embodying the requirements of the Board, how they are discussed, worked upon at the ports, and finally completed in preparation for the practical work involved.

But, while the work of designing has been going forward, the Director of Stores, the Director of Dockyards,

and other officials who are concerned in the building of ships, have made full preparation for the work. I have at present only dockyard-built ships in view. Vast quantities of stores of almost every imaginable kind are built up into ships. Steel, iron, timber, hemp, manufactured articles, castings, forgings, armour-plate, machinery, guns—all these are brought together for the construction of a single vessel. The reader has been informed what course is taken in regard to the provision of naval ordnance. The propelling machinery of dockyard-built ships is excepted from the work of the Director of Contracts, but for all else the Director of Stores is responsible. In regard to the materials and stores necessary for the construction and outfit of new vessels, as well as for repairs, of which the annual supply is regulated by prospective demands, the Director of this Department takes steps to obtain most accurate information as to the requirements under the shipbuilding programme, ship by ship, so as to avoid an accumulation of excess stocks for shipbuilding purposes.

But the Director of Stores, is not, as we have seen, a purchasing officer. He forwards to the Director of Navy Contracts requisitions for the purchase of all naval stores necessary for the Service. The Director of Navy Contracts is supplied at the same time with full particulars and specifications; and by one of the methods which I indicated in the chapter devoted to his Department, he proceeds to his work of purchase. In many matters he makes his purchases from the selected firms. In regard to some special requirements he may buy direct from firms of established repute; for others, and perhaps more specially for the requirements of the Victualling Department, he may purchase in the open market. The procedure is different when propelling machinery is bought, as I shall show below. For ships built in the dockyards the machinery is usually procured by contract,

but in some cases it has been constructed with advantage in the public establishments.

It may be instructive if I illustrate how far-spreading is the mesh of shipbuilding work under the Admiralty over the industries of the country. In the case of the *Renown*, built at Pembroke, the contract for the propelling and auxiliary machinery was placed in the hands of an eminent firm of contractors, Messrs. Maudslay, Sons, and Field. The propelling machinery, boilers, and some other parts were manufactured by this firm, but the steering engines, the electric light dynamos, the evaporators and distilling condensers, the hydraulic machinery, the boat hoists, and the indicators were provided by sub-contractors in various parts of the country. The same was the case with the crank-shafts, the intermediate and stern shafts, the piston and connecting-rods, the crossheads, the cast-steel crank-bearing frames, the cast-steel pistons, the cylinder covers, the steel springs, the brass condenser tubes, the copper steam-pipes, the boiler-plates and furnaces, and a considerable number of other parts of the machinery. In this way we see that the spending of naval funds gives employment to a great number of industrial establishments.[1]

The procedure as regards ships built by contract is different, though much of what I have said, *mutatis mutandis*, will apply to it. Here, again, the Director of Navy Contracts plays no part. As is the case also with propelling machinery built by contract, the professional part of the business is conducted through the Controller of the Navy, who is advised thereon by the Director of Naval Construction and the Engineer-in-Chief. The list

[1] For these facts I am indebted to an article by Commander C. N. Robinson, R.N., entitled "Naval Reinforcements in War Time—the Supply of Warship Material and Machinery," in the "Naval Annual" of 1895.

of firms to be asked to tender is decided by the First Lord, the Controller, and the Parliamentary and Financial Secretary, who also decide the allocation of the contracts. The relation of the Controller and Financial Secretary to this business is governed by the general relations of the members of the Board to the First Lord. It is the practice of the Admiralty to make one firm responsible for the contract both for the hull and machinery, although a sub-contractor may be recognized for the latter. Ship-builders and engineers are associated, and the responsibility is generally placed upon the former. Moreover, it often happens that the productions of specified firms are directed to be employed, where this is seen to be to the advantage of the public service, and capstan-gear, as was the case with the *Renown*, and other portions of the vessel's equipment, are sometimes supplied by the dockyards. The armour is nearly always bought by the Admiralty, and supplied to the contractor, and, for obvious reasons, the armament is kept wholly distinct from the contract for the hull. The firms selected to be placed on the Admiralty list are judged, as I showed in an earlier chapter, to have sufficient experience in the building of ships and the construction of engines, and no name is placed upon the list until after careful examination has been made. For the hulls of vessels complete specifications and designs are prepared by the Director of Naval Construction, and a like procedure by the Engineer-in-Chief is taken in regard to machinery. Under these conditions, vast sums of money are expended annually in private shipbuilding yards, in which the work is carried on under the close supervision of the Admiralty.

It is highly important, as I have said, for the country that happy relations should be preserved with contractors. Upon this depends the ability to increase upon emergency our constructive means. Shipbuilders must be encouraged by work that assumes the character of continuity to provide themselves with the proper plant for the con-

struction of warships, and to familiarize themselves with Admiralty methods. This applies, as I have shown, in smaller degree, to a great number of contractors who are not brought into direct relations with the Admiralty itself. Unhappily, the best relations have not always been preserved with contracting firms, especially in former times. The Committee appointed in 1886 to inquire into the System of Purchase and Contract in the Navy, reported that invitations to tender had been accompanied with the intimation that alternative designs might be furnished. The absence of a fixed basis of value resulted, making the tenders to some extent a matter of opinion, and placed the Board in the hands of the professional officers, who alone could be in a position to form a judgment upon offers made upon varying designs. In the case of the *Renown* and *Sans Pareil*, tenders were invited for the hulls and machinery of the vessels jointly, with an indication as to the natural and forced draught to be developed, and a request for alternative designs. Messrs. Palmer offered to construct one vessel for £587,854, and Messrs. Elder to build two for £590,000 each, with engines of 8,500 i.h.p. as specified. The offers accepted were one from the Thames Iron Works for £601,000, and the other from Messrs. Armstrong for the price of £604,000, the engines providing for 10,000 horse-power. It consequently became a matter of opinion as to what was the value of the additional 1,500 horse-power. A valuation was made by the professional officers at the time, but the Committee of 1886-7 was of opinion that this valuation was perfectly arbitrary, and quite at variance, according to the evidence given before it, with the intrinsic cost of the attainment of the additional horse-power, viewed by the addition it required to the engines and boilers. Even in regard to the ships of the Naval Defence Act, some difference arose. The Thames Iron Works and Messrs. Earle's Shipbuilding Company made claims for loss sus-

tained in building the first-class cruisers intrusted to them. Disputes, too, have since arisen with other contractors.

There is, however, no reason to feel surprise that differences of opinion should exist where work is complex and progress continually suggests further developments, nor that some friction should arise. I cite this matter, not to the disparagement of the Admiralty system, but to illustrate the fact that the Admiralty system must depend very largely upon the wisdom of individuals, and it is unnecessary to disguise that wisdom, as in former times, has in some instances been denied to us.

What I said just now concerning the Director of Naval Stores, will apply equally well to the other Store Departments, which proceed to their work in a closely similar manner. Thus, the Director of Victualling, having made his estimate, spends the money voted by indenting upon the Director of Navy Contracts. There is, however, a certain flexibility in the methods pursued, and necessarily so, for victualling stores are largely of a perishable nature, and are bought under special conditions, often through running contracts. The procedure is closely analogous in the matter of medical stores.

The reader has seen in previous chapters how the stores purchased by all Departments are received, surveyed, and accounted for, and I have sketched the manner in which, with them, ships are built in accordance with designs, provisioned, and fitted, and how thus the great work of building warships and preparing them for commission is achieved. It is a work which goes on at the dockyards under close supervision. The abuses which existed before the Dockyard Committee exposed them have been uprooted. The dockyard administration has been placed upon a new footing, the Expense Accounts have been established, and a most efficient machinery has been created for the supervision, survey, and estimating of work as it proceeds. The operations of the Accountant-

General of the Navy are throughout highly important; he is the financial adviser and assistant of the Departments, constantly working at the recording of expenditure, and, as I have explained, furnishing regular returns to assist the executive Departments in their work. In the Ledger Branch of the Accountant-General's Department, all expenditure is brought to book under the several votes and sub-heads of votes, and in this branch the all-important Navy Appropriation Account is prepared.

That account is the public explanation of the progress of naval expenditure, and of the manner in which the money voted is utilized. It enables the closest investigation of facts to be conducted in the soundest way for the public service. The "financial control" of the Accountant-General, as a departmental officer, could never have been efficient. Since his power of "review" was abolished, the work of audit has fallen to the Comptroller and Auditor-General, and the careful investigation of the Public Accounts Committee, before which the heads of the spending Departments explain and defend their administration of the votes, is the soundest guarantee that the public funds are expended well.

The spending well of the public funds voted for the naval service of the country is the crown and completion of the Admiralty's work. That our Navy is the admiration of the world, both for the characters which it possesses and the economy and rapidity with which ships are built, is sufficient evidence that the money is well expended. With the mention of the Navy Appropriation Account, which is the public exposition of Admiralty finance, I bring my book to a close. We have surveyed the whole of the Admiralty organization. From an historical introduction, showing how ancient precedent rules the Admiralty procedure, I went on to describe how the Admiralty Board conducts its operations, and I have completed my work by an attempt, imperfect I know, to de-

scribe the Admiralty machine at work. The task has been a difficult one, for upon this subject no one has ever written at length before, but it has been pleasant to describe that organizing force which shapes and directs our naval policy and provides for the maintenance of our sea power. When we read of naval operations, of battles and single-ship actions, of cutting-out expeditions, and of prizes taken from the enemy, we are sometimes apt to forget that behind all this rests the directive hand of the Admiralty Board. It is right, however, that this Board should be recognized as holding its due position in the work of our naval defence. If I have contributed, in some degree, to awaken the public to a knowledge of what our Admiralty administration really is, and of giving a right understanding of the manner in which the Admiralty works, this book will not have been written in vain.

APPENDIX I.

Admiralty Buildings.

The Admiralty Office in the days of the Lords High Admiral was merely the personal office used by the holder of the appointment, and thus was liable to change of locality. The Duke of Buckingham convened his new "Council of the Sea" at Wallingford House, near Whitehall, in 1626, and, after his assassination, the Admiralty Commissioners then appointed continued to meet there until the execution of Charles I. Afterwards the Earl of Northumberland dated his official correspondence from his house in Queen Street, Covent Garden, and the Earl of Warwick from Warwick House, Holborn. In 1660 the Admiralty business was conducted in the old Palace of Whitehall, and, after being transacted at Derby House, Canon Row, Westminster—which Pepys bought from the Duke of Ormond—it was brought back to the Palace of Whitehall in 1684. When Pepys resumed office as Secretary of the Admiralty in 1688, he carried on the business of the Navy in York Buildings, the site of which is marked by the water gate at the foot of Buckingham Street, and, after being transferred in the following year to a house at the south end of Duke Street, Westminster, which had been built for the notorious Judge Jeffreys, the Admiralty was finally restored to its old quarters at Wallingford House in 1695.

Buckingham's building had, however, been pulled down before September, 1694, for in that month and year an agreement was entered into between the Principal Officers of the Navy and John Evans, stipulating that the latter should erect a new house on the site, which was done, and, in 1719, certain sheds which stood before the building being removed, the courtyard was enlarged, and rails and gates were erected. But this new Admiralty

building appears to have been erected in haste, for, in 1722, it had so far fallen into decay, that the now existing building was put in hand, the business of the office being meanwhile conducted at a house in St. James's Square. Thomas Ridley, at whom Pope jeers bitterly in the "Dunciad" (iii. 1, 327), was the architect of the new structure, and the cost appears to have been more than £22,000. The building was commodious at the time of its erection, and included official residences for the Lords of the Admiralty and the Secretary, who were accustomed to live in close communication among themselves; but the business of the Admiralty has now long outgrown it. The edifice has two deep wings, and is entered through a lofty—far too lofty—portico, supported by elongated Ionic columns. The *Mermaid* sloop of war brought 600 planks of mahogany from Jamaica in 1724 for the doors and woodwork of the building, and the Board Room was adorned by the chisel of Grinling Gibbons. The Lords Commissioners moved into the new building in September, 1725. The existing screen, which incloses the courtyard of the Admiralty on the street side, was erected, mainly to conceal the unprepossessing character of the building, in 1760, the architect being Robert Adams, one of the two brothers who designed the Adelphi.

Unworthy and inadequate as the building in many ways is, it is filled with historic interest, for it was the central office of our naval administration through the long struggle with France, and beneath its portico all the greatest seamen of England have passed. There, with the words, "Sir, we have gained a great victory, but we have lost Lord Nelson," Collingwood's Trafalgar despatch was brought to Mr. Marsden, the Secretary, at about one o'clock on the morning of November 6th, 1805. The chamber still exists in which Lord Barham, the venerable First Lord, was sleeping when he was aroused to receive the tidings of the great victory, and they show still the "Captain's Room"—the first on the left of the passage, as you enter from the hall to the principal staircase—in which Nelson's body rested on the night preceding the state funeral at St. Paul's. The art treasures of the building include two sea-pieces by Van der Velde, and sundry pictures by Francesco Guardi, W. Hodges, R.A., J. Webber, R.A., W. Westall, A.R.A., and others, besides portraits of Nelson, by

Guzzardi, and of William IV., by Sir William Beechey. But the utter inadequacy of the Admiralty building at Whitehall has rendered extension necessary, and the Office of Her Majesty's Works has added a new wing on the side of St. James's Park—part of a larger structure to which some of the Admiralty offices have lately been transferred. A view of the Admiralty before the erection of Adam's screen, was engraved for Strype's edition of Stow's "London," 1754, and another exists from the graver of D. Cunego, 1760, reproduced on p. 17 of the present volume. An architectural plan and elevation of the screen were published in the same year, when it was erected, and since that time many views of the Admiralty have been issued. A plate of the interior of the Board Room, by Pugin, with figures by Rowlandson, is very interesting (see p. 110).

The work of the civil departments of the Navy, and especially of victualling, was conducted by the Navy Board in Queen Elizabeth's reign at an office on the east side of the Tower, known as the "Queen's Consultation Room," where a large storehouse and ovens were built. The Victualling Office was long situated here, while the Navy Office itself was located on the west side of Mark Lane, surrounding three sides of a courtyard, and entered through a passage. This building is represented as the "Old Navy Office" in the map accompanying Strype's edition of Stow's "London" (1720), when the office itself had been removed to the angle formed by Seething Lane and Crutched Friars, with an entrance from both. The house in Seething Lane, where Pepys was besieged by bailiffs, and whence he escaped only by the window, was a structure consisting of a central block, with a portico, surmounted by a pediment, and having two wings, and plain buildings surrounding a court at the rear. A view of it was engraved in 1714 by Thomas Taylor, inscribed, "The Navy Office, London," and dedicated to "The Right Honourable the Principal Officers and Commissioners of Her Majesty's Navy." There is an engraving also by B. Cole, 1750, which appears to be copied from Taylor's view, and is described erroneously as of the "Navy Office in Broad Street" (see p. 65). Actually it was the Navy Pay Office that was located there, standing on the west side of Old Broad Street, near London Wall. A pencil drawing of it, by G. Shepherd, March

21st, 1816, is in the Crace Coll., Brit. Mus., xxv. 39, and is reproduced on p. 122 of this volume. Afterwards the Pay Office was removed to Tower Hill, within reach of the guard. During the Plague of 1665 the business of both the Admiralty and Navy Boards was temporarily removed to the Manor House at Greenwich, and the Navy Office narrowly escaped the Great Fire of 1666. For a long time subsequently the work of the civil department was carried on at Seething Lane, but, about 1780, the office was transferred to Somerset House, where the Victualling, Navy Pay, and Transport branches were located on the west side, while the official residences of the Treasurer and Surveyor of the Navy, of the three Commissioners of the Navy Board, and of the Principal Officers of the Victualling Department were on the west terrace. The Royal Academy of Arts was located in the same buildings. The civil departments of the Navy were successively removed thence to Whitehall and Spring Gardens, the Surveyor's Department in 1855 and the rest by 1870, whereby the conduct of business was greatly facilitated.

For many of the particulars here given concerning Admiralty buildings I am indebted to a valuable pamphlet prepared some years ago for official purposes by Mr. Frank Miller, Superintendent of the Victoria Victualling Yard at Deptford. This gentleman has kindly placed his information at my disposal. I have also to acknowledge my obligations to Mr. W. D. Barber, of the Hydrographic Department at the Admiralty, for the charming view of the interior of the Admiralty Board Room, forming the frontispiece to this volume, which that gentleman has allowed the publishers to reproduce from a photograph by himself.

APPENDIX II.

THE ORDERS IN COUNCIL.

IN Part I., Chapter III., the text of the Admiralty Patent is given. The following are the several Orders in Council modifying the constitution of the Board, or under which, conjointly with the Patent, the Admiralty is now administered.

A.—ORDER IN COUNCIL, 14TH JANUARY, 1869.

The Constitution of the Admiralty Board and the Position of the Controller.

WHEREAS we have had under our consideration the present recognised constitution of the Board of Admiralty, the position occupied by the Controller of the Navy in regard to the Board, and the general transaction of business at the Admiralty offices.

The Board of Admiralty, as hitherto, consisted of—

The First Lord, receiving four thousand five hundred a year (£4,500);

Four Naval Lords, at a salary of one thousand (£1,000) a year each, with allowances and a house, or twelve hundred a year without a house; and

The Civil Lord, who receives one thousand (£1,000) a year only;

The First or Parliamentary Secretary receives two thousand (£2,000) a year, with allowances and a house.

The Second or Permanent Secretary receives fifteen hundred (£1,500) a year, with allowances and a house.

The Secretaries have jointly charge of the Secretariat, and the First Secretary has important duties in Parliament in connection with the Department.

We most humbly beg leave to propose to your Majesty that, with a view of simplifying and facilitating the transaction of the

business of the Department, and more effectually controlling naval expenditure, the office of Controller of your Majesty's Navy should be merged into that of the Third Lord, the office of Fourth Naval Lord being dispensed with.

The Board will then be constituted as follows :—

The First Lord of the Admiralty,
The First Naval Lord,
The Third Lord and Controller,
The Junior Naval Lord, and
The Civil Lord,

with the Parliamentary Secretary and the Permanent Secretary.

The First Lord being responsible to your Majesty and to Parliament for all the business of the Admiralty, the other members of the Board should act as his assistants in the transaction of the duties, which we propose should be divided into three principal branches :—

(*a.*) The First Naval Lord to be responsible to the First Lord of the Admiralty for the administration of so much of the business as relates to the "Personnel" of the Navy, and for the movement and condition of your Majesty's Fleet.

The Junior Naval Lord to assist the First Naval Lord in this division of the business.

(*b.*) The Controller of the Navy being, as we have proposed, the Third Lord, to be responsible to the First Lord of the Admiralty for the administration of so much of the business as relates to the "Matériel" of your Majesty's Navy, *i.e.*, to the building and repairing of ships, to guns, and to naval stores.

(*c.*) The Parliamentary Secretary to be responsible to the First Lord of the Admiralty for the "Finance" of the Department, and the Civil Lord to act as an Assistant to the Secretary.

The Permanent Secretary should have the exclusive charge of the Secretariat, under the directions of the First Lord of the Admiralty.

The merging of the Controllership of the Navy in the office of

the Third Lord, and the reduction of one of the Naval Lords, will effect a saving of two thousand five hundred pounds (£2,500) a year; but to mark the special responsibilities of the First Naval Lord and the Third Lord, we humbly propose that their salaries should be increased by five hundred (£500) a year each, with official residences, the other allowances to the members of the Board ceasing.

We are further of opinion that the Parliamentary Secretary should have the salary as hitherto apportioned to that appointment, but without a house or allowances.

And we beg leave most humbly to acquaint your Majesty that the Lords of the Treasury have signified their concurrence in the financial part of these arrangements.

B.—Order in Council, 19th March, 1872.

The Comptroller of the Navy re-established, and a Naval Secretary appointed.

Whereas by your Majesty's Order in Council of the 14th day of January 1869, certain changes were effected in the constitution of the Board of Admiralty, the position occupied by the Comptroller of the Navy in regard to the Board, and the general transaction of business at the Admiralty Offices; and whereas it has become desirable to effect certain changes in the said order, we most humbly beg leave to propose to your Majesty that the said Order should be rescinded, and that—

I. The Board should, in future, be constituted as follows:—

The First Lord of the Admiralty,
The First Naval Lord,
The Second Naval Lord,
The Junior Naval Lord,
The Civil Lord.

II. That there should be three Secretaries, to be called

The Parliamentary Secretary,
The Permanent Secretary,
The Naval Secretary.

III. That the office of Comptroller of the Navy be re-established, as an office to be held for a fixed period by an officer not a member of the Board, and that the Comptroller be assisted by a permanent officer, to be called Deputy Comptroller and Director of Dockyards, whose duties shall be mainly concentrated on the management of the dockyards.

IV. The First Lord to be responsible to your Majesty and to Parliament for all the business of the Admiralty, the business to be transacted in three principal divisions :—

(*a.*) The First Naval Lord, the Second Naval Lord, and the Junior Naval Lord to be responsible to the First Lord of the Admiralty for the Administration of so much of the business relating to the "Personnel" of the Navy, and to the movement and condition of your Majesty's Fleet, as shall be assigned to them or each of them, from time to time, by the First Lord.

(*b.*) The Comptroller to be responsible to the First Lord for the administration of so much of the business as relates to the "Matériel" of your Majesty's Navy, the Comptroller to have the right to attend the Board, and to explain his views whenever the First Lord shall submit to the Board, for their opinion, designs for ships, or any other matters emanating from the Comptroller's Department.

(*c.*) The Parliamentary Secretary to be responsible to the First Lord for the Finance of the Department, and for so much of the other business of the Admiralty as may be assigned to him.

(*d.*) The Civil Lord, the Permanent Secretary, and the Naval Secretary to have such duties as shall be assigned to them by the First Lord.

We humbly propose that the Second Naval Lord shall have a salary of £1,200 a year, and that the Naval Secretary shall have a salary of £1,500 a year and a house, or an allowance of £200 in lieu of a house; and We beg leave most humbly to acquaint your Majesty that the Lords Commissioners of your Majesty's Treasury have signified their concurrence in the financial part of these arrangements, and We further recommend that these arrangements shall begin to take effect on the 19th day of April, 1872.

C.—Order in Council, 9th August, 1872.

Orders to the Accountant-General for the Payment of Money. The Parliamentary Secretary to Sign.

Whereas by your Majesty's Order in Council of the 19th day of March, 1872, certain changes were effected in the constitution of the Board of Admiralty, and in the number and functions of the officers of the Board, and it was thereby (among other things) provided, that there should be three Secretaries to the Board, one to be called the Parliamentary Secretary, who was to be responsible to the First Lord of the Admiralty for the Finance of the Department; and whereas it is the long established practice of the Admiralty that all orders for payment of money, directed to the Accountant-General of your Majesty's Navy, should be signed by two of the Lords Commissioners of the Admiralty; and whereas, regard being had to your Majesty's said Order in Council, it seems to us expedient that an alteration should now be made in that practice; we, therefore, most humbly beg leave to propose to your Majesty that, for the future, the Parliamentary Secretary to the Admiralty may sign, in lieu of one of the Lords Commissioners of the Admiralty, any order for payment of money directed to the Accountant-General of your Majesty's Navy.

We beg leave to represent to your Majesty that the Lords Commissioners of your Majesty's Treasury have signified their concurrence in this proposal.

D.—Order in Council, 10th March, 1882.

Re-constitution of the Board of Admiralty.

Whereas by your Majesty's Order in Council of the 19th day of March 1872, certain changes were effected in the constitution of the Board of Admiralty, among which changes it was provided that the office of Comptroller of your Majesty's Navy was to be held for a fixed period by an officer not a member of the Board of Admiralty; and whereas it was also provided that there should be a Naval Secretary as well as a Permanent Secretary to the

Board of Admiralty; and whereas it has become desirable that the officer filling the post of Comptroller of your Majesty's Navy should, during such period as may from time to time be sanctioned by your Majesty's Letters Patent, notwithstanding the said Order in Council, be appointed to be an additional Naval Lord of the Admiralty, and that during such time an additional Civil Lord of the Admiralty may be appointed who shall possess special mechanical and engineering knowledge as well as administrative experience to assist the Comptroller in the administration of the matériel of your Majesty's Navy; and whereas it is not necessary in our opinion that there should be more than one Secretary to the Board of Admiralty in addition to the Parliamentary Secretary, we most humbly beg leave to propose to your Majesty:

1. That the officer filling the post of Comptroller of your Majesty's Navy may, notwithstanding the said Order in Council, be appointed an additional Naval Lord of the Admiralty.

2. That during the time that the officer holding the post of Comptroller of your Majesty's Navy is appointed to be an additional Naval Lord of the Admiralty, an additional Civil Lord of the Admiralty may be appointed. Such additional Civil Lord shall possess special mechanical and engineering knowledge, as well as experience in the superintendence of large private establishments; he shall assist the Comptroller in the business relating to the matériel of your Majesty's Navy, and perform so much of the said business as shall from time to time be assigned to him by the First Lord of the Admiralty.

3. That neither the appointment of additional Naval Lord of the Admiralty nor that of additional Civil Lord of the Admiralty shall be held by a member of either House of Parliament.

4. That there shall, upon a vacancy occurring in the office of Naval Secretary, be, besides the Parliamentary Secretary, only one other Secretary to the Board of Admiralty, who shall be called the Permanent Secretary.

5. We humbly propose that the additional Civil Lord shall have a salary of £2,000 a year, and the Permanent Secretary a salary of £1,800 a year and a house, or an allowance of £200 a year in lieu of a house. In the event of the office of Permanent Secretary being held by a naval officer, such officer shall not be allowed half or retired pay or other naval allowances.

6. We beg leave most humbly to acquaint your Majesty that the Lords Commissioners of your Majesty's Treasury have signified their concurrence in the financial part of these arrangements.

E.—Order in Council, 18th November, 1885.

The Accountant-General to act as Deputy and Assistant of the Financial Secretary.

Whereas by an Order in Council of the 13th day of October, 1832, the functions of the Accountant-General of the Navy were defined, and whereas by your Majesty's subsequent Orders in Council of the 14th day of January, 1869, and 19th day of March, 1872, certain alterations were approved by your Majesty in the constitution of the Board of Admiralty, affecting its financial arrangements, by the appointment of the Parliamentary and Financial Secretary to be responsible to the First Lord of the Finance of the Department; and whereas it is, in our opinion, desirable to afford him assistance in the discharge of these important duties, we would humbly recommend to your Majesty the appointment of the Accountant-General of the Navy to act as an assistant to the Financial Secretary.

We are most humbly of opinion that while the Executive Departments of the Admiralty should continue to be held primarily responsible for keeping a careful watch upon the expenditure they recommend or incur, the Accountant-General should be authorized to act under the Parliamentary and Financial Secretary as his Deputy and Assistant.

With this object he should be charged under the Parliamentary and Financial Secretary with the preparation of the Naval Estimates; with financially reviewing the expenditure under those estimates; with advising or deciding as to any redistribution of votes or transfers which may from time to time be found necessary; with satisfying himself that such expenditure is properly allowed and brought to account; with advising on all questions affecting naval expenditure; and that he should not only be made acquainted with ex-

penditure after it has been incurred, but be regarded as the officer to be consulted on all matters involving an expediture of Naval Funds.

We therefore most humbly submit that your Majesty will be graciously pleased to sanction this arrangement.

APPENDIX III.

The Navy Estimates.

The following statement indicates the course pursued in regard to the Navy Estimates. The preparation of several of the votes by the Accountant-General follows upon the compiling and working out of these by the Executive Departments responsible for the administration of them.

I. NUMBERS.

Vote A.

Total number of Officers, Seamen, Boys, Coast Guard, and Royal Marines.

Prepared by Accountant-General from numbers decided by their Lordships, and sanctioned by Order in Council, as regards Officers, Seamen, Boys, and Coast Guard.

The Deputy Adjutant-General is consulted with respect to the Royal Marines, for whom there is an establishment of 12,900, fixed by Order in Council of 26th June, 1886. Any variation from the foregoing requires similar sanction.

II. EFFECTIVE SERVICES.

VOTE 1.

Wages of Officers, Seamen, etc.

This vote is prepared by the Secretariat and the Navy Pay Division of the Accountant-General's Department from the numbers shown in Vote A. at authorized scales of Pay and Allowances, some of the items, *e.g.*, Contingencies, Coast Guard, Recruiting Expenses, etc., being based on past expenditure.

Salaries, etc., Royal Marine Divisions.—According to fixed rates of Salaries and Allowanes.

Half-Pay.—Based on authorized rates and probable numbers.

VOTE 2.

Victualling and Clothing for the Navy.

The Accountant-General prepares the items relating to Salaries, Police, Wages of Naval Men, Extra Pay, Rents, and Contingencies. Gas and Water by Director of Works.

The chief items of the Victualling Vote are worked out by the Director of Victualling, viz., Wages of Artificers, Crews of Yard Hoys, Provisions, Mess-traps, etc., and are referred to the Accountant-General.

The Director of Victualling concurs in the Vote as a whole.

VOTE 3.

Medical Establishments and Services.

Prepared by Accountant-General as regards Salaries and Allowances, Wages of Naval Sick Berth Staff, Police (at Home), Extra Pay, Rents, and Contingencies, etc.

The Director-General estimates for Civilian Wages, Hospital Provisions, Miscellaneous Disbursements, etc., and refers the items to the Accountant-General for concurrence. He also concurs in the Vote as a whole.

Vote 4.

Martial Law.

Prepared by the Accountant-General. The estimates for the Prison Establishments are based upon authorized Scales of Salary, and upon the average expenditure in past years as regards other items.

Vote 5.

Educational Services.

Prepared by the Accountant-General from information supplied by some of the Educational Establishments and partly from authorized Scales of Salary and Allowances.

Vote 6.

Scientific Services.

Prepared by the Accountant-General. The estimate is based upon the authorized Numbers and Scales of Pay, etc. Information is furnished by the Hydrographer.

Vote 7.

Royal Naval Reserves.

Prepared by Accountant-General. The Admiral Superintendent of Naval Reserves furnishes the numbers of the various Ranks and Ratings to be provided for.

The Admiral Superintendent of Naval Reserves concurs in the Vote, as a whole.

Vote 8.

Shipbuilding, Repairs, Maintenance, etc.

Section I.—Personnel.

Prepared by the Accountant-General as regards Salaries and Allowances, and Contingencies, etc.

The Director of Dockyards under the Controller furnishes the amounts for Labour, etc., at the Yards.

Section II.—Material.

The Director of Stores estimates the requirements of Stores, both under the head of Shipbuilding and Maintenance.

Other items are estimated by the Accountant-General.

Section III.—Contract Work.

Estimate is prepared by the Director of Naval Construction under the Controller.

Estimates for Labour and Stores, etc., are furnished by the Controller's Department, and referred to the Accountant-General.

Vote 9.

Naval Armaments.

Estimate prepared by Director of Naval Ordnance under the Controller, and referred to the Accountant-General.

Vote 10.

Works, Buildings, and Repairs at Home and Abroad.

Estimate prepared by the Director of Works, except as regards the Salaries and Allowances of the Officers superintending Works in progress, which are furnished by the Accountant-General.

The items for Works are referred for the concurrence of the Controller and the Accountant-General.

Vote 11.

Miscellaneous Effective Services.

The Estimate is prepared by the Accountant-General, principally upon the average expenditure in previous years, any new items or doubtful points being considered separately.

VOTE 12.

Admiralty Office.

Prepared by the Accountant-General. The Estimate is based on the authorized members for each rank, any variations in numbers or Scales of Salary receiving separate consideration and Treasury authority.

III. NON-EFFECTIVE SERVICES.

VOTE 13.

Half-Pay, Reserved and Retired Pay.

VOTE 14.

Naval and Marine Pensions, Gratuities and Compassionate Allowances.

VOTE 15.

Civil Pensions and Gratuities.

The foregoing Votes (Nos. 13 to 15) for Non-Effective Services are prepared by the Accountant-General, and are based upon the numbers actually in receipt of Retired Pay or Pensions, plus the anticipated requirements of the ensuing financial year.

APPENDIX IV.

BIBLIOGRAPHY.

Parliamentary Reports, Papers, etc.

Reports of the Commissioners appointed by an Act of 43 Geo. III. for Inquiring into Irregularities, Frauds, and Abuses practised in the Naval Departments, and in the Business of Prize Agency:

First Report: Naval Storekeepers at Jamaica. 1802-3 (78).

Second Report: Chest at Chatham. 1802-3 (97).

Third Report: Block and Coopers' Contracts. 1802-3 (109).

Fourth Report: Prize Agency. 1802-3 (160).

Fifth Report: Sixpenny Office. 1802-3 (174).

Sixth Report: Plymouth and Woolwich Yards. 1803-4 (83).

Seventh Report: Naval Hospital at East Stonehouse—*Le Caton* hospital ship. 1803-4 (172).

Eighth Report: Victualling Yard at Plymouth.—Embezzling Casks. 1803-4 (179).

Ninth Report: Plymouth Yard. 1805 (1).

Tenth Report: Treasurer of the Navy. 1805 (21).

Eleventh Report: Issue of Navy bills for the purpose of raising money. Loss arising from the mode of paying interest on Navy and Transport bills. Money imprested by the Navy Board for secret naval services. 1805 (47).

Twelfth Report: Purchases of hemp, masts, and fir timber. Transfer of contracts. Observations by way of supplement to First Report. 1806 (1).

Thirteenth Report: Contracts for victualling sick prisoners of war. 1806 (161).

Fourteenth Report: Greenwich Hospital. 1806 (256).

Report of the Select Committee upon the Tenth Naval Inquiry Report of the Commissioners. 1805 (140). Eleventh Report. 1805 (184).

Report from the Committee of Secrecy on the Eleventh Report. 1805 (198).

Letter of Lord Viscount Melville to the Commissioners of Inquiry; and Answer. 1805 (72).

Precepts issued by the Commissioners of Naval Inquiry to the Treasurer of the Navy. 1805 (93).

Letter from the Comptroller of the Navy to the Lords' Commissioners of the Admiralty on the Eleventh Report of the Commissioners of Naval Inquiry. 1805 (94).

Letter from the Principal Officers and Commissioners of the Navy to the Secretary of the Admiralty, inclosing a Memorial in Answer to the First Report of the Commissioners of Naval Inquiry. 1805 (100).

Letter and Minute of Censure from the Lords of the Admiralty to the Navy Board. 1805 (203).

Reports from the Select Committee appointed to draw up Articles of Impeachment against Henry Lord Viscount Melville. 1805 (206); 1806 (23); 1806 (26).

Reports from the Select Committee appointed to inspect the Journals of the House of Lords in relation to the proceedings upon the impeachment. 1806 (241); 1806 (69).

Reports of the Commissioners for Revising and Digesting the Civil Affairs of His Majesty's Navy:

First Report: Dockyards. 1806 (8).
Second Report: Dockyards. 1806 (92).
Third Report: Dockyards. 1806 (312).
Fourth Report: Navy Office. 1809 (120).
Fifth Report: Foreign Yards. 1809 (121).
Sixth Report: Dockyards at Outports. 1809 (122).
Seventh Report: Naval Hospitals. 1809 (123).
Eighth Report: (not printed).
Ninth Report: Transport Office. 1809 (124).
Tenth Report: Victualling Office. 1809 (125).
Eleventh Report: Victualling Yards at Outports. 1809 (126).
Twelfth Report: Victualling Department Abroad. 1809 (127).
Thirteenth Report: Transport Board. 1809 (128).

Account of expenses incurred by the Commissioners for revising the Civil Affairs of the Navy. 1806 (67) (68).

Reports of the Commissioners appointed by Act 25 Geo. III., c.

19, to inquire into the fees, perquisites and emoluments which are or have been lately received in the several public offices. Dated in 1786-8. 1806 (309).

Third Report, Admiralty (p. 93); Fourth Report, Treasurer of the Navy (p. 131); Fifth Report, Commissioners of the Navy (p. 165); Sixth Report, Dockyards (p. 277); Seventh Report, Sick and Hurt Office (p. 507); Eighth Report: Victualling Office (p. 549): Ninth Report, Naval and Victualling Yards Abroad (p. 723).

Accounts respecting Navy and Victualling Accounts from 1790 to 1823. 1823 (417).

Report from a Select Committee appointed to inquire into the circumstances relating to the formation of the Victualling establishment at Cremill Point, and the proceedings of the Admiralty and Victualling Boards thereon. 1831-2 (272).

Instructions from the Board of Admiralty to the Board of Naval Constructors appointed to inquire into the State of Naval Architecture, May 9, 1846. 1847 (289).

Report from the Select Committee appointed to inquire into the circumstances under which a circular sent to the Superintendent of Her Majesty's dockyards was cancelled without order or minute of the Board; also under which a letter from Sir Baldwin Walker, tendering his resignation as Surveyor of the Navy, was withheld from the Board, etc. 1852-3 (511).

Report of the Committee on Dockyard Economy, appointed by the Admiralty. 1859 (139, Sess. 2).

Minutes of Evidence taken before the same. 1859 (139—I. Sess. 2).

Observations of the Superintendent and officers of the dockyards, and of the Accountant-General and Storekeeper-General of the Navy on the same; also Memorandum of the First Lord, with Board Minute thereon. 1860 (79).

Report from the Select Committee of the House of Commons appointed to inquire into the constitution of the Board of Admiralty, and the various duties devolving thereon; also as to the general effect of such system on the Navy; together with the Proceedings of the Committee, Minutes of Evidence, Appendix and Index. 1861 (438).

Report of the Commissioners appointed to inquire into the control and management of Her Majesty's Naval Yards, together with the Minutes of Evidence and Appendix. 1861 (2790).

The Distribution of Business among the Lords of the Admiralty under the old and new arrangements for conducting the business of the Department. 1868-9 (84).

Correspondence and other papers relative to alterations in the organization and business of the Admiralty. 1868-9 (402).

Report from the Select Committee of the House of Lords appointed to inquire into the present state of the Board of Admiralty, with reference to recent changes in the constitution of the Board, and the practical working of the Department, with proceedings, evidence, etc. 1871 (30).

Orders in Council relating to the construction of the Board of Admiralty and the professional staff of the Controller's Department. 1872 (408).

Comparison of the Civil Establishments of the Admiralty, 1868-69 to 1872-73. 1872 (256).

Report of the Committee appointed by the Admiralty to inquire into the amount, etc., of Naval Accounts. 1873 (70).

Treasury Minute as to extending the powers of the Controller and Auditor-General in auditing the naval and military accounts. 1871 (483).

Minute by the First Lord of the Admiralty with reference to H.M.S. *Captain*, with the minutes of the proceedings of the court-martial, and the Board Minute thereon. 1871 (c. 254).

Copy of the Reply made by Sir Spencer Robinson to Minute by the First Lord of the Admiralty. 1871 (37).

Letter addressed by the Admiralty to Admiral Sir James Hope, in reply to his letter to the Admiralty commenting on the proceedings of the court-martial held to inquire into the loss of H.M.S. *Captain*. 1871 (38).

Letter from the Admiralty to Captain Cowper P. Coles, directing him to report on the first and second cruises of H.M. ship *Captain*; reports and letters. 1871 (163).

Reports of the Admiral in command of the Channel Squadron as to the trials of the ships *Monarch* and *Captain*; with reports from the captains of the respective ships. 1870 (402).

Report of the Committee appointed by the Admiralty to

inquire into the system under which the duties of the Store Department of the Navy are conducted, with minutes of evidence. 1877 (c. 1646).

Report of the Select Committee of the House of Commons on Admiralty Liabilities. 1885.

Report of a Committee appointed by the Admiralty to inquire into rules and alterations necessary to secure effective control over the expenditure of the various Departments. 1885.

Reports of the Select Committee on the Army and Navy Estimates. 1887.

Report of the Committee appointed by the Admiralty to inquire into the system of Purchase and Contract in the Navy; minute of Lord George Hamilton, evidence and appendix. 1887 (c. 4987).

Report of a Committee appointed to inquire into Dockyard Administration, Expenditure, etc. 1887 (c. 4978).

Reports of the Royal Commission appointed to inquire into the Civil Establishments of the different offices of State at home and abroad; evidence, appendices, etc. 1887.

Reports from the Select Committee of the House of Commons on Navy Estimates; proceedings, evidence, etc. 1888.

Reports of the Royal Commission on Warlike Stores. 1888.

Preliminary and further Reports of the Royal Commissioners appointed to inquire into the Civil and Professional administration of the Naval and Military Departments, and the relation of these Departments to each other and to the Treasury. ("Hartington Commission.") 1890.

General Literature touching Admiralty Administration.

The Œconomy of His Majesty's Navy Office, containing the several duties of the Commissioners and Principal Officers thereof. Being the first rules established for them by the Duke of York under Charles II., and continued in force to this day. By an Officer of the Navy. 1717.

A Collection of Statutes and Parts of Statutes relating to the Admiralty, etc., down to the fourteenth year of George II. 1755.

A Collection of the Statutes relating to the Admiralty, Navy, Ships of War, etc., to the eighth year of George III. 1768.

An Answer to Mr. Pitt's attack upon Earl St. Vincent and the Admiralty on 15th March, 1804. 1804.

Audi Alteram Partem, or the Real Situation of the Navy of Great Britain at the Period of Lord St. Vincent's resignation, being a reply to misstatements by an Officer of His Majesty's Navy. 1804. (A reply to the last.)

Memoirs of the Administration of the Board of Admiralty under the Presidency of the Earl of St. Vincent. N. D. (1805.) (A defence of St. Vincent by his friends.)

Naval Anecdotes for the years during which the Earl of St. Vincent presided at the Board of Admiralty. By a Recorder of Facts. 1805. (Violently abusive.)

A Key to the Papers which have been presented to the House of Commons upon the subject of the charges preferred against the Earl of St. Vincent by Mr. Jeffry. 1806. (A defence of St. Vincent's conduct and policy, probably by Ben. Tucker.)

Naval Anecdotes, or a new Key to the Proceedings of a late Naval Administration. 1807. (A scurrilous reply to the last.)

A Collection of Statutes relating to the Admiralty, etc., down to the fiftieth year of George III. 1810.

Remarks on the Conduct of the Naval Administration of Great Britain since 1815. By a Flag Officer. (Sir Charles Vinicombe Penrose.) 2 editions. 1830.

Observations on the Preparation and Discipline of the British Navy, with suggestions for a better system. 1837.

A Brief Memoir of the life and writings of the late William Marsden, F.R.S. 1838.

Memoirs of Admiral the Earl of St. Vincent. By Jedediah Stephens Tucker. 2 vols. 1844.

Remarks on the Naval Administration of Great Britain since 1815. With a Preface by Admiral Bowles. 3rd edition. 1847.

An Autobiographical Memoir of Sir John Barrow, including reflections, observations, and reminiscences at home and abroad from Early Life to Advanced Age. 1847.

Naval Financial Reform. A letter addressed to the First Lord of the Admiralty, on Portions of the Naval Report of the Finance Committee. By Jedediah Stephens Tucker. 1849.

Napier, Sir Charles. The Navy: its Past and Present State. In a series of Letters, edited by Sir William Napier. 1851.

Administration of the Admiralty. Opinions of the late Right Hon. Sir George Cockburn, Bart., on the necessity of remodelling the Admiralty Board. 1855.

The Orders in Council and some of the Acts of Parliament for the Regulation of the Naval Service. 5 vols. 1856-58.

Admiralty Administration: its faults and its defaults. Second edition, revised. 1861.

Our Nautical School, Wh . . . . . ll (*i.e.*, the Admiralty), giving a Description of its Proceedings from the First Reformed Parliament in 1832. With a brief allusion to the loss of the *Captain*, and the resignation of Mr. Chil . . . s (*i.e.*, Right Hon. W. H. Childers). 1871.

Recent Naval Administration. By Lord Brassey. Second edition. 1872.

Admiralty Reform: the necessity of undertaking it and the Direction that should be given to it. By Admiral Sir Spencer Robinson. 1886 (pp. 30).

Papers and Addresses by Lord Brassey, K.C.B., D.C.L. Naval and Maritime; 1872 to 1893. Arranged and edited by Captain S. Eardley-Wilmot, R.N. 1894.

The British Fleet. By Commander Charles N. Robinson, R.N. 1894. Second edition. 1895.

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